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ABSTRACT

The educational system of Switzerland is described, and guidelines concerning the academic placement of students who wish to study in U.S. institutions are provided. After describing primary and secondary education, attention is directed to teacher training, tertiary education, and training in the health fields. Specific considerations include: academic and vocational upper-secondary school, secondary school general education, teacher training for different educational levels and for special subjects, and professional degree programs in dentistry, medicine, pharmacy, veterinary medicine, nursing, dental assisting/hygenics, dietetics, hospital administration, optometry, pharmacy, social work, laboratory technology, and physical/occupational therapy. Placement recommendations are provided for university programs in 21 fields, including agriculture, art, business administration and commerce, engineering, forestry, law, library science, music, social work, and theology. Profiles of 10 Swiss universities are also provided. A list of private Swiss schools offering British, Canadian, and/or U.S. curricula is appended, along with a list of federally-recognized Swiss academic upper secondary schools. Also appended are the German, French, and Italian designations of primary and secondary programs. (SW)

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SWITZERLAND

Karlene N. Dickey

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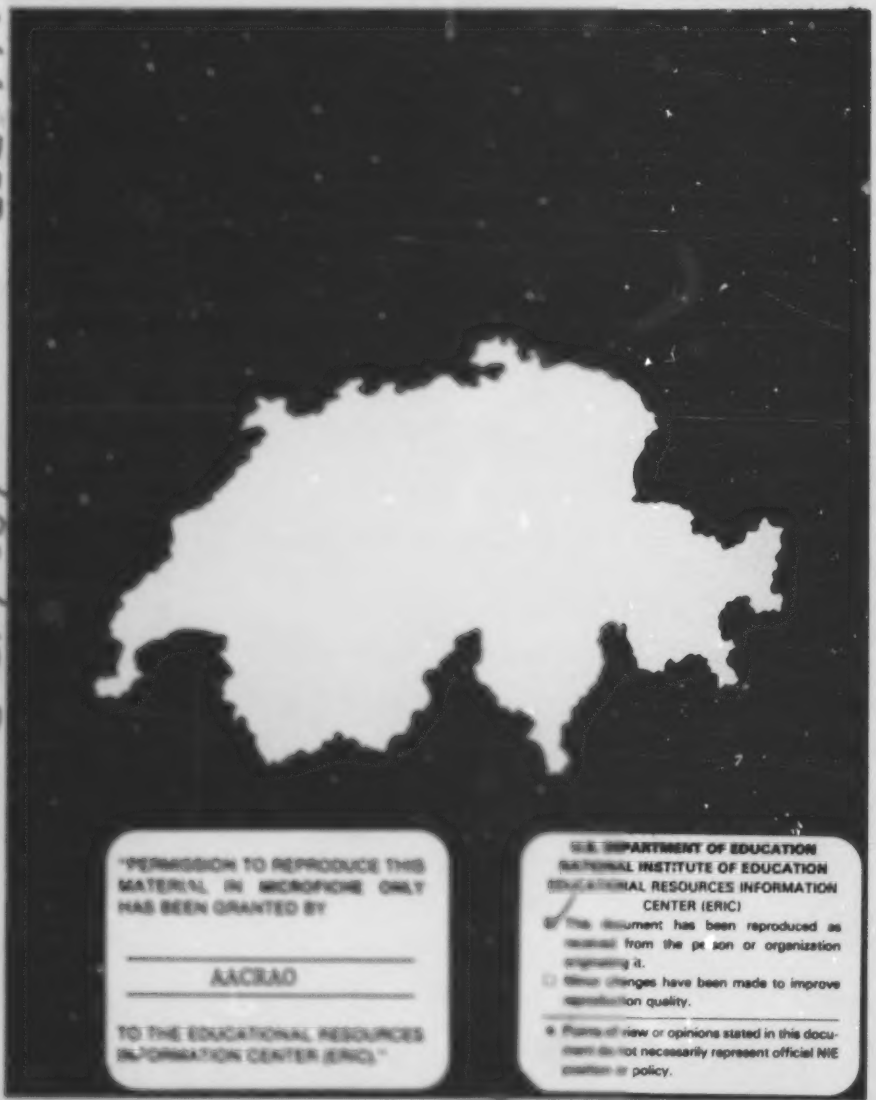

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Switzerland

A Study of the Educational System of Switzerland and a Guide to the Academic Placement of Students from Switzerland in Educational Institutions of the United States

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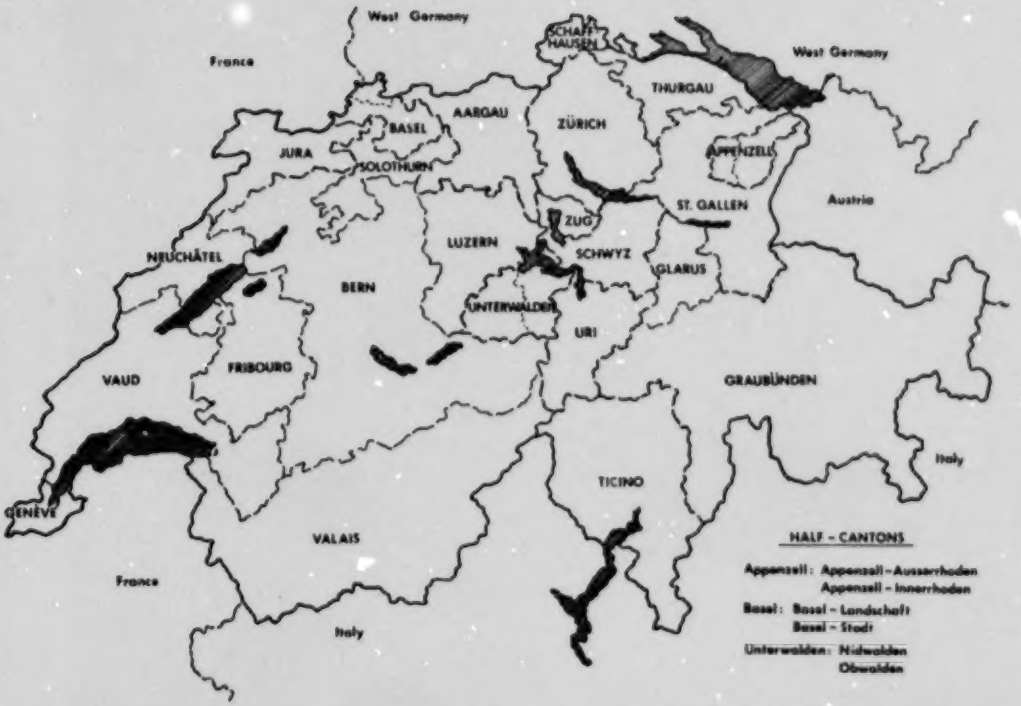

CANTONS OF SWITZERLAND

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Map by Robert R. Dickey

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Preface

Writing this book has been a challenge and a chore, at times exhilarating and at times exhausting, but above all a unique opportunity and experience. Many individuals have given their time and their thoughts to make the work possible. Rebecca Dixon, of The American University, provided the original inspiration to take on the job. Caroline Aldrich, of the California State University, Chico, has been most supportive throughout the whole period of preparation. Jim Frey, of Educational Credential Evaluators, Inc., has been a painstaking monitor, whose experience as the author of several World Education Series volumes was invaluable. His careful notes on numerous drafts helped immensely with the organization of the material and clarity of the text. He always highlighted any point that wasn't clear! Kitty Villa, University of Texas in Austin, was a helpful "second reader." It was always a pleasure to work with Lucy McDermott, the WES editor, who went out of her way to ease the author's burden and improve the quality of the text.

I want to thank the many educators of Switzerland who gave their time, prepared literature for me, patiently talked with me, often in a language not their native tongue, replied to follow-up inquiries, and reviewed sections of the drafts. Dr. Roland Hofmann, Scientific Counselor of the Embassy of Switzerland, Washington, D.C., was most helpful in establishing contacts in Switzerland, reviewing the manuscript, and providing enthusiastic encouragement.

The staff on the *Bundesamt für Bildung und Wissenschaft* in Bern handled expertly the arrangements for appointments. Dr. Emile Blanc, of the Swiss Center of Documentation of Teaching and Education Materials in Geneva, provided detailed information on cantonal variations.

Particular appreciation is due W. B. Carnochan, former Vice Provost and Dean of Graduate Studies, Stanford University, for permitting me to take this work on, and the staff of the Graduate Division Administrative Center, without whose loyal support and competent work I could not have found the necessary time to complete this task.

My husband, Bob, is also due special thanks, not only for graciously accepting the extra work necessary for me to complete the book, but also preparing the careful drawing of the map of Switzerland.

Lastly, to the country of Switzerland—for its quiet beauty, its peaceful and orderly life styles, its value of the individual, its fierce patriotism, and its gentility—my thanks for the opportunity to know it better.

Karlene N. Dickey
Stanford, California
April, 1981

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Special Considerations for Placement of Students Presenting Swiss Educational Credentials

Education in Switzerland is very structured. Selection of academic track is as early as fifth grade. All vocations are regulated by the Confederation. Within most vocations, there are several levels of certification. While most vocational training includes academic studies, the focus is on the vocational aspects. The amount of academic credit granted for vocational certificates needs to be carefully considered.

The Swiss Confederation, the 26 cantonal governments, and the various professional societies establish accreditation procedures for all types of training. There are, however, in Switzerland numerous private institutions, without federal or cantonal recognition, which are not under the supervision of any professional group. Academic records from such unaccredited establishments need to be carefully reviewed and treated in line with the institution's policy on accepting studies undertaken at unaccredited schools in the United States.

Swiss students are exposed to language study at a very early age. Many students who have completed secondary or tertiary programs have command of at least two official languages of Switzerland and have often studied English for a number of years. All students, however, should be tested for English by use of a standard English language test, such as TOEFL, before enrollment. It can be expected that due to the lifelong exposure to daily use of several languages, most Swiss students will master English rapidly.

Placement recommendations in this book are grouped either at the end of the appropriate chapter or immediately following the discussion of a particular field of study. The Table of Contents lists the location of all placement recommendations.

Chapter I

Introduction

Official Name: Swiss Confederation. Confoederatio Helvetica (Latin) (abbreviated in mail addresses, on postage stamps, and license plates as CH). It is known in three of the official languages of Switzerland as Schweizerische Eidgenossenschaft (German); Confédération Suisse (French); Confederazione Svizzera (Italian).

Capital: Bern; Location: Central Europe; Literacy Rate: 99%.

Size: 15,944 sq mi (slightly less than half of the state of Maine).

Greatest Length: 226 miles; Greatest Width: 127 miles.

Population (1978): 6.3 million, including just under 1 million foreigners.

Political Divisions: 23 cantons, three of which are divided into half cantons, making 26 political units. A list of cantons appears in Table 1.

Language:[1] There are four official languages: German, French, Italian and Romansch. Romansch, a dialect based on Latin spoken primarily in the canton of Graubünden, was recognized as an official language in 1938. Official documents, however, are not prepared in Romansch. The only place Romansch is used in the educational system is in the lower primary grades in Graubünden.

Percentage of Population Using Each Language (1970): 75% German, 20% French, 4% Italian, 1% Romansch.

Religion: 49.4% Roman Catholic, 47.8% Protestant, 2.8% Other.

Primary Historical Events:

1291	First three cantons (all German-speaking) sign Perpetual Covenant: pledge of mutual support and defense. This becomes the foundation of the Confederation.
1300-1800	Ten more cantons join the first three for mutual support and defense.
1803	Confederation grows to 19 cantons as an aftermath of the Napoleonic wars.
1815	Three more cantons join the Confederation bringing total to 22. Swiss neutrality receives international recognition at the Congress of Vienna.
1848	Federal constitution approved by 22 cantons, 3 of which had divided into 2 half-cantons each, making a total of 25 political units. The Confederation now included German-, French- and Italian-speaking cantons.
1874	Constitution revised; forms the base of present government.
1978	New canton of Jura formed from three French-speaking districts, formerly part of the canton of Bern, where a sizable French-speaking population remains.

1. Throughout the book, names, designations, etc., which are used in several languages, will be given first in English; these will be followed with translations, first in German, then in French, and finally in Italian.

Table 1. The Cantons and Half-Cantons of Switzerland*

Canton	Year Joined	Capital	Other Cities	Language(s) Spoken
Aargau (Argovie)	1803	Aarau	Brugg Windisch	German
Appenzell†				German
Appenzell-Ausserrhoden (Rhodes Extérieures)	1513	Herisau	—	German
Appenzell-Innerrhoden (Rhodes Intérieures)	1513	Appenzell	—	German
Basel†				
Basel-Landschaft (Bâle-Campagne)	1501	Liestal	—	German
Basel-Stadt (Bâle-Ville)	1501	Basel	—	German
Bern (Berne)	1353	Bern	Biel (Bienne) Burgdorf (Berthoud) Moutier (Moutier) Zollikofen	German/French
Fribourg (Freiburg)	1481	Fribourg	—	French/German
Genève (Genf)	1815	Genève	—	French
Glarus (Glaris)	1352	Glarus	—	German
Graubünden (Grisons)	1803	Chur (Coire)	—	German/Italian/Romansch
Jura	1978	Delémont	—	French
Luzern (Lucerne)	1332	Luzern	—	German
Neuchâtel (Neuenburg)	1815	Neuchâtel	Le Locle	French
Schaffhausen (Schaffhouse)	1501	Schaffhausen	—	German
Schwyz	1291	Schwyz	—	German
Solothurn (Soleure)	1481	Solothurn	Olten	German
St. Gallen (St. Gall)	1803	St. Gallen	Buchs Rapperswil	German
Thurgau (Thurgovie)	1803	Frauenfeld	—	German
Ticino (Tessin)	1803	Bellinzona	Cannobio Locarno Lugano	Italian
Unterwalden†				
Nidwalden (Nidwald)	1291	Stans	—	German
Obwalden (Obwald)	1291	Samen	—	German
Uri	1291	Altdorf	—	German
Valais (Wallis)	1815	Sion (Sitten)	—	French/German

Vaud (Waadt)	1803	Lausanne	Glion Leysin Yverdon	French
Zug (Zoug)	1352	Zug	—	German
Zürich	1351	Zürich	Küsnacht Winterthur	German

*The name in parentheses is the other name (French or German) by which a canton is known. It is only given where there is a marked variation between languages. Cities listed are principally those with tertiary level educational institutions.

†Canton is divided into half cantons; names listed directly underneath.

Government Organization

Switzerland is a confederated republic, i.e., a democratic federal state. The government is headed by a Federal Council of seven selected representatives from different cantons and linguistic parts of the country. It forms the executive body of the Confederation. Each of the seven members heads a particular administrative department. One of the seven representatives, selected in rotation determined by seniority of accession to the Council, serves a one-year term as President of the Confederation.

The Federal Assembly is a two-chamber legislature, consisting of the National Council of 200 members directly elected by the people for four-year terms and the Council of States composed of two representatives from each full canton. Cantons which are divided have one representative from each half canton.

The Confederation is a direct and representative democracy, based on the principle of the sovereignty of the people and the separation of powers. The cantons and half-cantons each have their own governments and constitutions. The townships, of which there are 3,042, are known as communes and form the basic citizenship units. No change in the federal constitution can be effected except by majority approval of both *all* voters and *all* cantons.

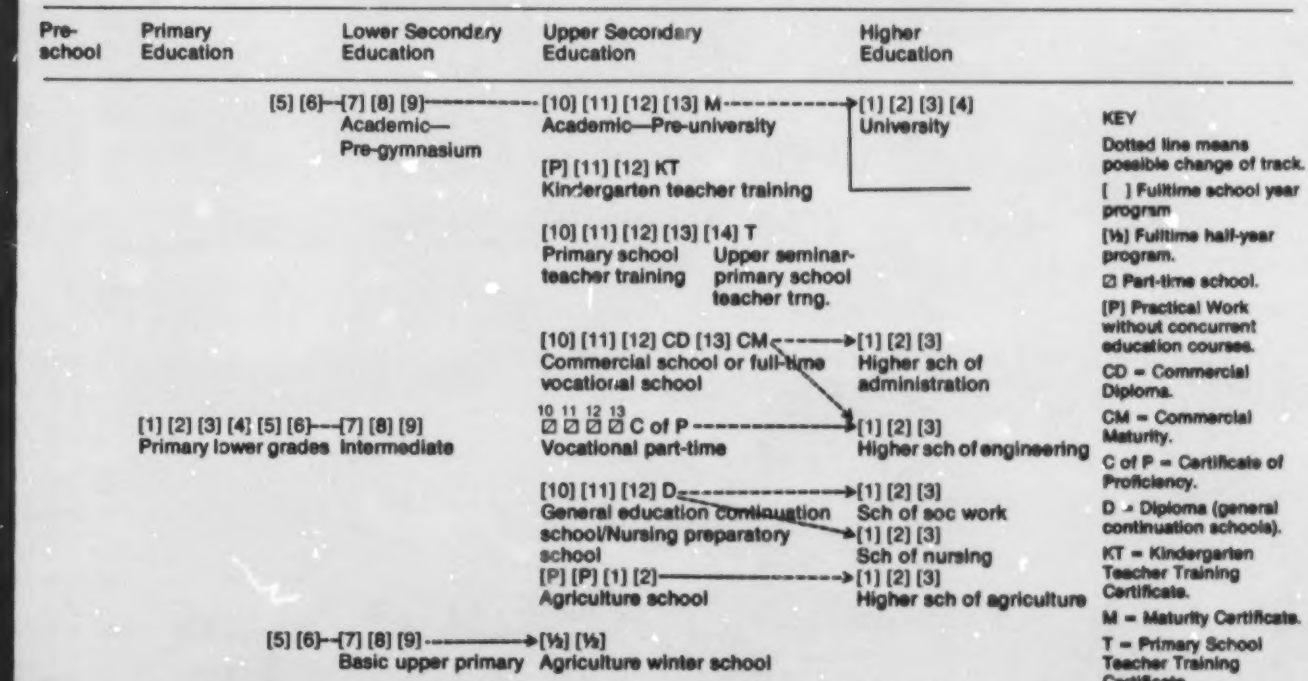
The constitution of 1848, revised in 1874, created a federal system which aims at promoting economic and political unity and stability, but recognizes the basic autonomy of the cantons. All possible areas are left to cantonal authority. The federal government regulates only those areas where a unified system is necessary for operational purposes: currency, customs, foreign affairs, military affairs, postal service, radio, tariffs, telegraph service, railroads, and weights and measures.

Role of the Federal Government in Education

There is no official ministry of education in charge of education. The federal government's jurisdiction in education is limited to very specific areas.

- **Vocational Education.** Vocational education was placed under federal control by the cantons because uniformity of training was required for the development of the economy of Switzerland as a whole.
- **Professional Medical Education.** All training and certification in the medical fields (dentistry, food chemistry, medicine, pharmacy, and veterinary medicine) is federally regulated.

Table 2. The Educational System of Switzerland—A Generalized Outline


Pre-school
Primary Education
Lower Secondary Education
Upper Secondary Education
Higher Education
[5] [6]–[7] [8] [9]
Academic—Pre-gymnasium
[10] [11] [12] [13] M
Academic—Pre-university
[1] [2] [3] [4]
University
[P] [11] [12] KT
Kindergarten teacher training
[10] [11] [12] [13] [14] T
Primary school teacher training
Upper seminar-primary school teacher trng.
[10] [11] [12] CD [13] CM
Commercial school or full-time vocational school
[1] [2] [3]
Higher sch of administration
[1] [2] [3] [4] [5] [6]–[7] [8] [9]
Primary lower grades
Intermediate
10 11 12 13
☑ ☑ ☑ ☑ C of P
Vocational part-time
[1] [2] [3]
Higher sch of engineering
[10] [11] [12] D
General education continuation school/Nursing preparatory school
[1] [2] [3]
Sch of soc work
[1] [2] [3]
Sch of nursing
[P] [P] [1] [2]
Agriculture school
[1] [2] [3]
Higher sch of agriculture
[5] [6]–[7] [8] [9]
Basic upper primary
[½] [½]
Agriculture winter school
Grade 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Entry Age 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
KEY
Dotted line means possible change of track.
[ ] Fulltime school year program
[½] Fulltime half-year program.
☑ Part-time school.
[P] Practical Work without concurrent education courses.
CD = Commercial Diploma.
CM = Commercial Maturity.
C of P = Certificate of Proficiency.
D = Diploma (general continuation schools).
KT = Kindergarten Teacher Training Certificate.
M = Maturity Certificate.
T = Primary School Teacher Training Certificate.

NOTE: In 18 cantons, maturity certificate exams are taken upon completion of 13 yrs of education; in the other 8 cantons, upon completion of 12 or 12½ yrs.

- **Federal Universitie** . The 1874 constitution empowered the federal government to establish federal universities and other institutions of higher education. To date, two federal institutes of technology (Eidgenössische Technische Hochschule Zürich and Ecole Polytechnique Fédérale de Lausanne) are the only institutions of tertiary education directly controlled by the federal government. However, the federal government also provides substantial, and increasing, financial support to cantonal universities.

Role of the Cantons in Education

The federal constitution requires the cantons to provide adequate primary education which is free, compulsory, and open to all, regardless of religious preference. Each canton has a director of education and an educational administrative office. The school programs for each canton were developed within that canton. However, the cantonal educational systems were so varied that students could not easily transfer from one canton's program to that of another, even in the lower grades.[2] As the population became increasingly mobile in modern times, the need for intercantonal educational agreements became apparent. A Conference of Cantonal Directors of Education, with headquarters in Genève, has existed since 1897. In 1970 this group approved a Concordat on School Coordination which establishes the following standards for cantonal education: a uniform entrance age of 6; 9 years of compulsory education; a 38-week school year which begins between mid-August and mid-October (depending upon the demands of agriculture and weather in particular cantons); a minimum of 12 years and a maximum of 13 years of schooling for students who take the federal or cantonal maturity examinations.

The Concordat also presents recommendations on curricula, common teaching material, free transfer between schools of the same type, requirements for promotion to the secondary cycle, cantonal reciprocal recognition of leaving certificates, common nomenclature for certificates and types of schools, and equivalent training of teachers.

To date, 21 cantons and half-cantons have approved the Concordat and have conformed to all its recommendations or are in the process of doing so. Five are still withholding approval: Aargau, Bern, Basel-Stadt, and Thurgau agree to all provisions except an autumn date for beginning the school year; in these cantons the school year has traditionally started in the spring. Ticino has not yet signed because of resistance to increasing the school year to a full 38 weeks.

While variations remain among the cantons, the Concordat has been a major step toward standardization.

In addition to primary education, the cantons supervise upper secondary school programs. The cantons may confer the following cantonal certificates: (1) commercial maturity certificate for graduates of 4-year commercial programs; (2) certificate in teaching; and (3) maturity certificate to indicate completion of an academic secondary program which does not have federal recognition.

2. For a detailed description of cantonal variation in school programs prior to the recent trend to standardization, see the 1965 AACRAO volume, *Switzerland*.

Each canton has the authority to grant official recognition to private schools within its borders. Such recognition is required before a school may request federal recognition, which then permits private schools to prepare students for and to administer the Federal Maturity Certificate Examination.

Seven cantons have full jurisdiction over a university within their boundaries. One other, St. Gallen, shares such jurisdiction with the city of St. Gallen.

Cantons have control over the certification of teachers for all levels of education. Despite plans for standardization of training, there remains great variation in the requirements for certification.

Although vocational training comes under federal regulation, the federal government has also delegated to the cantons the authority to administer vocational proficiency examinations, and to issue vocational certificates of proficiency in accordance with the federal requirements.

Chapter II

Primary and Secondary Education

[NOTE: Appendix A gives the German, French, and Italian terminology and a brief description in English of all primary and secondary education programs.]

Kindergarten and Primary Education

Kindergarten programs exist throughout Switzerland and may be under cantonal, municipal, or private authority. It is estimated that 95% of the 5-year-olds in the cities but only 53% of the total age group of the country attend kindergarten. Efforts are being made to expand the programs into rural and mountainous areas.

Pupils enter school at age 6 (either 6 or 7 prior to 1970) and attend primary grades for four to six years (1-4, 1-5, or 1-6), depending on the canton. There is an increasing shift in all cantons towards a 6-year primary school pattern. The responsibility for primary education is delegated to local authorities.

Lower secondary refers to grades 4-9, 5-9, or 6-9, depending on the canton, and completes the compulsory school years. These grades are also occasionally referred to as "middle school." There are three types of lower secondary school: basic, intermediate, and academic. Each type is usually offered in a separate school, and each leads to a different type of upper secondary program. All but the basic programs require entrance exams. In most cantons, a decision on the type of education the pupil will pursue must be made on entrance to lower secondary school.

All cantons have separate special education schools or classes, known variously as *Einführungsklasse, Förderklasse, Hilfsklasse, Hilfsschule, Sonderschule* or *Sonderklasse/Classe spéciale/Classe speciale* or *scuola speciale,* for physically or mentally handicapped children.

Lower secondary schools are known by various names. The name of the school is often an indication of the type of school, i.e., basic, intermediate, or academic. (See Appendix A.) Approximately 40% of all lower secondary school pupils are enrolled in the basic upper primary program. The curriculum includes elementary science, drawing, geography, history, industrial arts or domestic science, mathematics, native language, physical education, singing and writing. Instruction averages 32 hours per week for 38 weeks a year.

The intermediate lower secondary schools offer the same curriculum as the basic upper primary schools but at a somewhat more advanced academic level. In addition, a second national language is taught.

The academic lower secondary schools prepare students to enter academic upper secondary schools, with the ultimate goal of university education. In some cantons, lower and upper academic secondary programs are offered at the same institution. In these cases, the lower secondary work is an integral part of the academic preparation for university entrance.

Table 3. Weekly Hours of Instruction in Subjects for Last Four Years of Study for Each Type of Maturity Exam in A Typical Academic Upper Secondary School in German-Speaking Area

Preparation for Maturity Type:	A. *Griechisch-Latein* (Greek & Latin)				B. *Latein-Moderne Sprach.* (Latin & Modern Langs.)				C. *Mathematisch-Naturwissenschaft* (Math & Science)				D. *Neusprachen*‡ (Modern Langs.)				E. *Wirtschaftswissenschen* (Economics)			
Grades (Klassenstufe) (Year in School)	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Art (*Zeichnen*)	2*	–	–	–	2*	–	–	–	2*	2*	–	–	2*	1*	–	–	2*	1*	–	–
Biology (*Biologie or Naturgeschichte*)	2	1	2	2	2	1	2½	2	2	–	2½	2	2	2	2	–	1½	1½	1½	1
Chemistry (*Chemie*)	–	2	2	2	–	1½	2	2	–	3	2	2	–	2	2	2	½	2½	2	1
Chemistry lab (*Chemie Praktikum*)	–	–	–	–	–	–	1	1	–	–	1	1	–	–	1	1	–	–	–	–
Economics (*Wirtschaft*)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5½	4	5½	5
English (*Englisch*)	3	3	3	3	3½†	3†	3†	3†	3†	3†	3†	3†	4	3½	3	3	3†	3†	4†	4†
French (*Französisch*)	3	3	3	3	3	3	3	3	4	4	3	4	3½	3½	3	4	3½	3	4	4
Geography (*Geographie*)	2	2	–	–	2	2	–	–	2	2	–	–	1	1	2	–	2	2	1½	1
Geometry, descriptive (*darstellende Geometrie*)	–	–	–	–	–	–	–	–	2	3	3	2	–	–	–	–	–	–	–	–
German (*Deutsch*)	3	3½	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	3½	4	5
Greek (*Griechisch*)	4½	4½	4½	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
History (*Geschichte*)	2	2	3	3	2	4	3	3	2	2	3	3	3	3	3	3	2	4	3	3
Italian (*Italienisch*)	–	–	–	–	3½†	3†	3†	3†	3†	3†	3†	3†	4	3	3	4	3†	3†	4†	4†
Latin (*Latein*)	4	4	4	4	4½	4	3½	4	–	–	–	–	–	–	–	–	–	–	–	–
Mathematics (*Mathematik*)	3	3	4	3	4	4	4	4	6	5	5	5	4	4	4	4	4	4	4	4
Music (*Musik*)	2*	–	–	–	2*	–	–	–	2*	2*	–	–	2*	1*	–	–	2½*	1*	–	–
Physical Ed. (*Turnen*)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Physics (*Physik*)	2	2	2	2	1½	2½	2½	2	3	2	3	3	1½	2	2½	3	2	2	2	1½
Physics lab (*Physik Praktikum*)	–	–	–	–	–	–	1	1	–	–	1	1	–	–	1	1	–	–	–	–
Total hrs pr wk	33½	33	33½	33	31½	32	32½	32	33	33	33½	33	32	32	33½	32	33½	33½	34½	32½

NOTE: French and Italian-speaking areas follow an instructional program similar to that of the German-speaking areas. There are minor variations in the number of hours in a given subject but all programs are required to meet the federal ordinance on Maturity Certificate preparation.

*Student must choose art or music.

†Types B, C, and E students may choose either English or Italian.

‡Type D students may select other modern languages.

The conclusion of the nine-year compulsory schooling period is rarely the end of a Swiss student's education. Those who complete a basic upper primary school program generally enter into an apprenticeship (usually combined with part-time vocational education), enroll in an agriculture program, or enter a general education continuation school for another one or two years. Those who complete an intermediate program may enter a combined apprenticeship-part-time vocational program, a fulltime vocational school, a teacher training institute, a commercial school, or, occasionally, an academic upper secondary school.

Upper Secondary Education

Upper secondary education (grades 10-12, 10-12½, or 10-13) is post-compulsory. The four general categories of programs, which vary in length from one to five years, are listed below with the percentage of students who attend each type.

1. Academic upper secondary education—usually a 3-, 3½- or 4-year program, 15% of the secondary level students;
2. Teacher training upper secondary education—2-, 4- or 5-year programs, 6% (see Chapter III);
3. Vocational upper secondary education—2- to 4-year programs, 75%;
4. General continuation upper secondary education (neither pre-university nor specifically vocational)—1- to 3-year programs, 4%.

Academic Upper Secondary Schools

Academic upper secondary schools may be cantonal or private, either religious or secular. The schools may be referred to by a number of names including "upper middle schools," "gymnasiums," or "colleges" (see Appendix A).

Academic upper secondary schools, which prepare students for Swiss university entrance, most frequently begin with grade 10. Students enter after three years of preparatory work in an academic lower secondary school. A number of these academic upper secondary schools offer lower secondary programs in the same school, usually beginning with grade 7 (grade 6 in Solothurn and Ticino). Prior to the School Concordat of 1970, some schools offered a grade 14 which now only exists in Valais Canton Maturity Type A and B gymnasiums. Eighteen cantons have 4-year upper secondary programs (grades 10-13); five have 3½-year programs (grades 10-12½), and only three (Basel-Stadt, Neuchâtel, and Vaud) have 3-year programs (grades 10-12). Swiss law requires all secondary students studying for the Maturity Examination (secondary school leaving examination) to complete 6 years of preparatory work.

Schools permitted to administer federal maturity exams must have received both cantonal and federal approval. This approval must be renewed at regular intervals. A federal ordinance spells out regulations on subjects taught, hours of instruction in each subject (varying by type of maturity preparation), length of total study, and the training required to qualify as an upper secondary school teacher. The requirements of the Federal Maturity Examination force the curricula to be highly structured, with few electives. (See Table 3.)

The Federal Maturity Certificate Examination is given in five subject areas: A—Greek & Latin; B—Latin & Modern Languages; C—Math & Science; D—Modern Languages; E—Economics. (The exam is discussed in more detail later in this chapter.) A student must choose an area of specialization at the time of entry into an academic upper secondary school.

The name of the school often reflects the type of education offered, e.g., *Humanistisches Gymnasium* or *Collège Classique* (classical, preparation for Maturity Certificates, Types A and B). Schools may offer programs leading to a single type, several types, or all five types of exams. In some cantons all five types are not offered.

In addition to upper secondary schools preparing students for Swiss universities, a wide variety of private international schools prepare students primarily for universities in other countries. These schools typically prepare students to take one of the following examinations: the U.S. College Board tests, the British General Certificate of Education (GCE) examinations at both "O" and "A" levels, Canadian Provincial Matriculation Examinations, the French *Baccalauréat*, and the International Baccalaureate. (A few private international schools have cantonal and/or federal recognition permitting them to prepare students for the Swiss Federal Maturity Examinations as well. Such schools must follow all Swiss regulations affecting that program.) Most of the students in these schools are non-Swiss.[1]

Grading Scales

A Swiss upper secondary school record reports marks in all courses, most frequently on a scale of 6 to 1, with 6 the highest; occasionally the scale is 10 to 1, with 10 the highest. A few schools use a reverse scale, with 1 the highest and 5 the lowest. On some records, a mark for industriousness *(Fleiss/Application/Diligenza)* and performance *(Leistung/Progrès/Avanzamento)* will be given in separate columns. Grades are routinely averaged and a passing average is usually stated. Frequently a parent's signature, as well as the school director's signature, will appear.

Suggested grading equivalences are as follows:

U.S.	"10" best	"6" best	"1" best	Descriptive Notes
A	10	6	1	*sehr gut/très bien/molto bene*
A–	9	–	–	
B	8	5	2	*gut/bien/bene*
B–	7	–	–	
C	6	4	3	*mittelmässig/suffisant/sufficiente*
C–	5	–	–	
D	4	3	4	*unbefriedigend/insuffisant/insufficiente*
D–	3	–	–	
E	2	2	5	*schlecht (schwach, sehr schwach)/mauvais/molto debole (nullo)*
F	1	–	–	

Grading in private international schools varies with the school and program and usually is the same as that used in the home country of the examination for which the student is preparing.

1. A booklet listing addresses and details of programs of all international private schools is available from any Swiss tourist office in the United States.

Academic Upper Secondary School Leaving Certificates

The Federal Maturity Certificate

The Federal Maturity Certificate *(Maturitätszeugnis/Certificat de Maturité/Attestato di Maturità)* is the most widely recognized secondary school certificate and is accepted for unrestricted admission to all faculties of Swiss universities and to the two federal institutes of technology.

The federal government originally established this certificate to regulate entrance into training for the health professions: dentistry, food chemistry, medicine, pharmacy, and veterinary medicine. It remains the only accepted entrance certificate for these programs. The federal examination program, which is administered by the Federal Commission on Maturity, has gradually expanded into other fields and now offers five types of maturity exams with the important effect of standardizing secondary programs throughout the cantons.

The five types of certificates with the number of persons receiving each type in 1977 are the following: Type A—Greek & Latin *(Griechisch-Latein/Classique/Classico)* (359); Type B—Latin & Modern Languages *(Latein-Moderne Sprach/Latine/Latino)* (3,803); Type C—Math & Science *(Mathematisch-Naturwissenschaft/Scientifique/Scientifico)* (2,819); Type D—Modern Languages *(Neusprach/Moderne/Linguistico)* (618); Type E—Economics *(Wirtschaft/Socio-économique/Economico)* (981).

Types D and E were established in 1972 to meet the needs of students who wished to study modern languages without Latin, and for those interested in the social sciences. Any student presenting a Federal Maturity Certificate will have completed the coursework listed in Table 4 where the specific requirements for each subject exam are given.

All students take a common set of nine examinations in the following subjects: two of the national languages, biology, chemistry, drawing or music, geography, history, math (arithmetic, algebra, geometry, and trigonometry), and physics, plus two subject exams in the area of the maturity specialization. These are as follows: Type A—Latin and Greek; Type B—Latin and a third national language or English; Type C—Geometry and a third national language or English; Type D—a third national language or English and an additional modern language; Type E—Economic Sciences and a third national language or English. The exams are both written and oral. Written exams require 2-4 hours depending on the subject; oral exams are 15 minutes each.

Results of the Federal Maturity Certificate Examinations are presented on a complete transcript. The grading scale, with the suggested U.S. equivalent is as follows: 6 = A; 5 = B; 4 = C; 3 = D; 2 = E; 1 = F. Grade values in the following core subjects for each type of exam are doubled; such subjects will be indicated on the transcript, usually by an asterisk. Type A—native language, Latin, Greek, and math; Type B—native language, second national language, Latin, math; Type C—native language, second national language, math, physics; Type D—native language, second national language, third national language or English, math; Type E—native language, second national language, economic sciences, math.

Grades for all 11 exam subjects are totaled, and the candidate must have a minimum of 58 out of 90 to pass. The candidate will also fail if the following grades are received in any of the required subjects except drawing or music: one grade of 1; two grades of 2; one grade of 2 and 3 grades of 3; more than

SCHWEIZERISCHE EIDGENOSSENSCHAFT

AARGAUISCHE KANTONSSCHULE AARAU
Literarabteilung des Gymnasiums
Typen A und B

MATURITÄTSZEUGNIS

Der Erziehungsrat des Kantons Aargau
bezeugt hiermit:

(Name of Student)

von Burg/AG, geb. 29. September 19 54

hat die Literarabteilung des Gymnasiums in Aarau

vom 22. April 19 70 bis zum 8. April 19 74

besucht und nach abgelegter schriftlicher und mündlicher Prüfung folgende Noten erhalten:

(name of student)

von (legal residence)

geboren (birth date)

hat das GYMNASIUM LIESTAL vom 15. April 1968
bis zum 25. Sept. 1971 durchlaufen. Gestützt auf die Ergebnisse der Maturitätsprüfung und die Leistungen während der Schulzeit erhält er das Maturitätszeugnis nach Typus C mit den nachstehenden Noten:

I. MASSGEBENDE FÄCHER		
Deutsch		3
Französisch		8
Englisch		4
Geschichte		4
Geographie		5
Mathematik		4
Physik		5
Darstellende Geometrie		4
Chemie		5
Naturgeschichte (Biologie)		4
Zeichnen		5
* nicht gemäß Art. 22 MAV doppelt	Punktzahl	61

II. NICHTMASSGEBENDE FÄCHER	
a) obligatorische	
Turnen	5
b) fakultative	

Liestal, den 28. September 1971

DER REKTOR

DER PRÄSIDENT DER PRÜFUNGSKOMMISSION

A.B.1 sind die Noten der gestrichenen Lehrgänge,
A.B.1 diejenigen der ungestrichenen Lehrgänge.

No. 1. Certificate of Maturity *(Maturitätszeugnis)*

25

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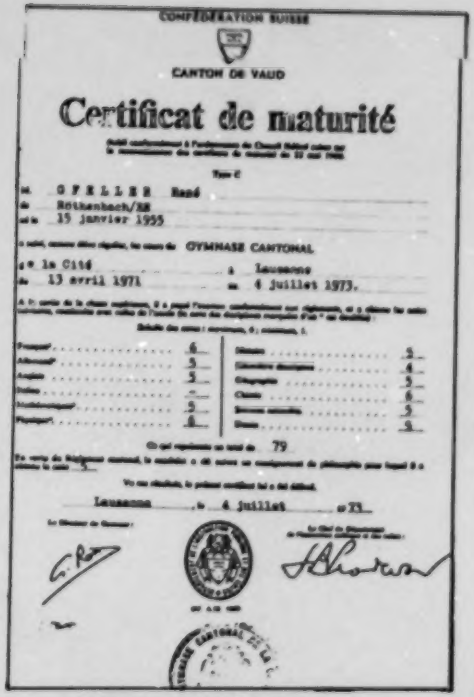


CONFÉDÉRATION SUISSE

CANTON DE VAUD

Certificat de maturité

Type C

M. GFELLER René
de Rothenbach/BE
né le 15 janvier 1955

a suivi, comme élève régulier, les cours du GYMNASE CANTONAL
à la Cité à Lausanne
du 13 avril 1971 au 4 juillet 1973.

Français	6	Histoire	5
Allemand	5	Géographie	4
Anglais	5	Biologie	5
Italien	-	Chimie	6
Mathématiques	5	Science naturelles	5
Physique	6	Dessin	5

Ce qui représente un total de 79

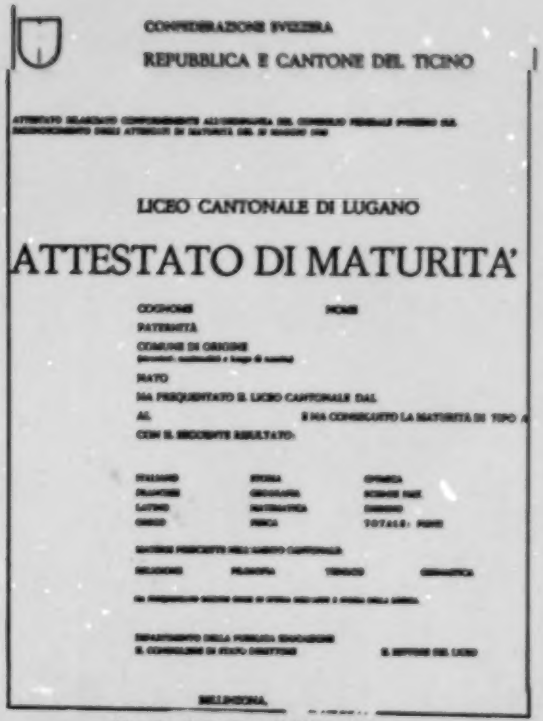
Lausanne, le 4 juillet 1973

Le Chancelier de l'Université

Le Chef du Département de l'Instruction publique et des cultes

Le Directeur du Gymnase cantonal de la Cité

No. 2. Certificate of Maturity
(Certificat de Maturité)



CONFEDERAZIONE SVIZZERA

REPUBBLICA E CANTONE DEL TICINO

ATTESTATO RILASCIATO CONFORMEMENTE ALL'ORDINANZA DEL CONSIGLIO FEDERALE SVIZZERO SUL RICONOSCIMENTO DEGLI ATTESTATI DI MATURITÀ DEL 20 AGOSTO 1968

LICEO CANTONALE DI LUGANO

ATTESTATO DI MATURITA'

COGNOME NOME

PATERNITÀ

COMUNE DI ORIGINE
(Distretto, cantone/stato e luogo di nascita)

NATO

HA FREQUENTATO IL LICEO CANTONALE DAL

AL HA CONSEGUITO LA MATURITÀ DI TIPO A

CON IL SEGUENTE RISULTATO:

ITALIANO	STORIA	GINNASTICA
FRANCESE	GEOGRAFIA	SCIENZE FISICHE
LATINO	MATEMATICA	DISEGNO
GRECO	FISICA	VOTAZIONE FINALE

MATERIE FREQUENTATE NELLO STESSO CANTONALE

RELIGIONE FILOSOFIA TEDESCO GINNASTICA

DIPARTIMENTO DELLA PUBBLICA EDUCAZIONE
IL CONSIGLIERE DI STATO DIRETTORE IL RETTORE DEL LICEO

BELLINZONA,

No. 3. *Attestato di Maturità)*
(Certificate of Maturity, Italian-speaking area)

*An asterisk indicates a core subject which is given double value.

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3 grades of 3. The exam may be retaken only once. The final certificate will not show that the exam was retaken.

An official Federal Maturity Certificate (see Documents 1, 2, 3) must contain the following information: as principal title: "Swiss Confederation" (Schweizerische Eidgenossenschaft/Confédération Suisse/Confederazione Svizzera); as sub-title: name of canton; name of school; reference to Swiss federal ordinance on maturity exam; family name, first name, hometown, and birthdate of student; exact entrance and leaving dates; type of maturity certificate; grades obtained in subjects; total of all grades; signatures of Director of Cantonal Public Instruction and of Director of the school.

A student who has followed an academic program in a school which does not have federal recognition for administering the Federal Maturity Examination may take the exam at one of the semiannual general testings arranged by the Confederation. Individuals over the age of 20 who have not been enrolled in academic secondary school may also sit for the exam at one of these administrations. Those who pass are considered to have achieved the identical level of education and have equal educational future privileges as those students who followed a prescribed academic secondary school course and graduated from a federally recognized school.

Table 4. **Subject Matter Covered on Federal Maturity Exams**

Arts

1. Drawing—Types A, B, C, D, E—Drawing of objects in plane and perspective; elementary knowledge of colors and their combinations; critical analysis of contemporary and older art.
2. Music—Types A, B, C, D, E—Elementary Musical Knowledge: diatonic and chromatic scales; theory of intervals and melody; measures and rhythms; perfect chords to the dominant seventh; mastery of musical notation; ability to play a musical instrument or to perform in choral singing.

Languages

1. Native Language—Types A, B, C, D, E—Precise knowledge of grammar, composition, and spelling; ability to read literary and non-literary texts and prepare summaries of reading; oral expression and correct pronunciation; thorough knowledge of six important works belonging to at least three different eras and to different literary genres; understanding of the place of the work in the life of the author and in the intellectual life of the era.
2. Second National Language (French, German, or Italian)—Types A, B, C, D, E—Knowledge of grammar, good vocabulary, ability to understand the spoken language and use it correctly; thorough knowledge of at least three literary works from three different periods, with understanding of the relationship of the work to the life of the author and to the intellectual epoch.

   Types B and E require a third national language or English. Type D requires a third foreign language which may be English, Spanish or Russian. The preparation for each language is the same.
3. Greek—Type A—Thorough knowledge of grammar and vocabulary. Texts covered include Xenophon, Plato, Herodotus, Homer and the Greek tragedies.
4. Latin—Types A and B—Thorough knowledge of grammar and vocabulary. Texts covered include Caesar, Cicero, Titus-Livy, Tacitus, Virgil *(Aeneid)*, Ovid *(Metamorphosis)* and Horace.

Mathematics

1. Arithmetic, Algebra, Geometry & Trigonometry—Types A, B, C, D, E—
   a) The series of natural, whole, rational, and real numbers; mathematical operations and their properties and orders; analysis of prime factors, the least common multiple and the largest common divisor; polynomials: addition, subtraction, multiplication, and their properties; polynomial quotients. Additional Material for Type C: The body of real numbers, complex numbers; Gaussian plane, geometric interpretation of operations, Moivre formula; substantial series, ideas of limits and theorems of limits; arithmetic and geometric progressions; Binomial theorem.
   b) Equations, inequalities and linear equations of the first degree with one, two, and three variables; second degree equations with one variable.
   c) Relations, applications, composition of applications, inverse application; simple rational functions, exponents and logarithmic functions, trigonometric functions.
   d) Derivatives, rules of derivation, discussion of functions, primitive functions and defined integrals; surface and volumes of simple bodies. Additional Material for Type C: idea of limits and continuity of function; method of substitution and integration by parts; theorem of the average; knowledge of practical applications.
   e) Geometric transformation, displacements and symmetries; similitudes in the plane; fundamental theorems of elementary geometry. Trigonometry: triangle rectangle, sine and cosine; addition theorems.
   f) Real vector spaces of 1, 2, and 3 dimensions, scalar product and vector product. Plane geometry applications: straight and circle (parametric representation and coordinated equations). Additional Material for Type C: Geometry of the cone-coordinated axes, planes, spheres; linear transformations of real vector spaces; for the 2nd dimension: composition of linear applications; proper vectors, matrixes and determinants.
   g) Descriptive Statistics: notion of probability, theorems of the sum and the product, normal distribution.
2. Descriptive Geometry—Type C--Representation of elements of space (points, lines and planes) in the system of two projections of Monge, relations of situation (intersection and parallel), metric problems (true size of segments and plane figures, orthogonality); representation of circle, spheres, cylinders and cones; tangent planes and plane sections; affinity in the plane: application to the study of figures in a plane or in space.

Sciences

1. Biology—Types A, B, C, D, E—Principles of Taxonomy: knowledge of one representative type of each of the following groups: bacteria, algae, fungi, protozoa, worms, arthropodes, vertebrates; organization and functions of the human body; photosynthesis, nutrition, respiration, movement, transfer, regulation; mitosis and meiosis, reproduction, embryonic development, general study of heredity (examples taken from human genetics); evolution of living beings, including humans; study of behavioral examples; relations between organisms in a natural milieu, interactions between nature and civilization.
2. Chemistry—Types A, B, C, D, E—Fundamental ideas: mixture, compounds, elements, combinations; atomic and molecular masses; stoichiometry: establishment of chemical equations, simple calculations; structure of the atom and atomic models; periodic system as a classification scheme; structure and properties of principal types of combinations: salts, covalently bound compounds, metals; energy effects in chemical reactions; chemical equilibrium (law of mass action, Le Chatelier principle); redox reactions, acid base chemistry, ionic equilibria, pH; knowledge of principal elements and mineral compositions; nature of carbon compositions, isomerics, simple examples of substitution, addition and polymerisation; principle of structure of hydrocarbons, oils, albumins, examples of higher polymers.

Type C candidates are expected, in addition, to be able to treat quantitatively simple chemical problems bearing in particular on the law of mass action, pH, and the heats of reaction.

3. Physics—Types A, B, C, D, E—
   a) Mechanics: velocity, acceleration, force, weight collisions, amount of movement considered as vectors; mass, pressure, kinetic moment, work, efficiency, kinetic and potential energy; principle of inertia, Newton's principles, theory of energy, acceleration, gravitational field, simple movement in straight and curved lines, harmonic oscillations. Additional Requirements for Type C: hydrostatics, Torricelli's formula of flow, Bernoulli's equation.
   b) Thermodynamics: thermal expansion and idea of temperature, ideal gas, absolute temperature; first principle (internal energy and heat), specific heat, latent heat, boiling curve.
   c) Electricity: electric charge, elementary charge, electric field, lines of force, flux, tensors, potential capacity; simple capacity; simple circuit; elementary ideas of magnetism. Additional Requirements for Type C: magnetic field. Lorentz force, induction, induction flow, auto-induction. Elements of theory of alternating current.
   d) Wave Mechanics: simple examples of waves; reflection, refraction, interference, standing waves, diffraction; applications to acoustics and optics.
   e) Requirements for Type C Only: Atomic physics, nuclear physics; physical properties of several elementary particles, spectra, radioactivity, simple nuclear reactions, mass energy relation.

Social Sciences

1. Economics—Type E—

   Business Economics: objectives, politics and structure of business; fundamental problems of organization, financing, production and sales, automation and its economic and social effects; business concentrations and their effects; financial and industrial accounting as the base for understanding of business; man in industrial society.

   Legal Ideas: workers in business, questions of laws of work and social justice, historical evolution of these ideas; general notions and particular questions of law of contracts; laws of societies and of securities, juridical protection of man in society.

   Political Economy: structure and functioning of economy; fundamental factors: nature, population, technique; importance of historical, social and psychological factors for political economy; objectives and techniques of political economy; economic circuit; costs and revenues.

   International Economic Relations: money and monetary problems; national accounting. Problems chosen from political economy of Switzerland and of other nations.

2. Geography—Types A, B, C, D, E—Natural spaces of the world, relationship between geographic factors and civilization; problems of food, industrialization and energy; limits of economic exploitation and the need for judicious use of natural products and the environment is included.

3. History—Types A, B, C, D, E—World history and Swiss history from the beginning of the 16th century until today. A general comprehension of cultural and intellectual evolution is stressed as much as political evolution. A subject must be chosen for intensive study from Ancient History or Medieval history (or from pre-16th century Swiss history). Type D students must choose one subject from each period. Civics (the origin and functioning of federal and cantonal institutions, laws and duties for citizens, present problems of Switzerland) is also required material for all students.

The Cantonal Maturity Certificate

Academic secondary schools which have cantonal but not federal approval of their programs may administer a Cantonal Maturity Examination which leads to a Cantonal Maturity Certificate *(Kantonale Maturität/Maturité cantonale/Maturità cantonale)*. Each canton has its own regulations for these exams, which follow the general outline of the federal exams, although in some cases they are less rigorous. Cantonal Maturity Examinations are usually offered in the same five subject types (A, B, C, D, E) as the Federal Maturity Examinations. Not all cantons offer all five types.

Cantons may offer additional maturity examination programs of their own choice. The following exist at present:

Canton	Type	Subject	Length of Study[2]
Aargau	Type PSG	Pedagogical-social	3 yrs
Basel-Landschaft	Type M	Music	4 yrs
Bern	Theological Maturity	Theology	2 yrs
Genève	Artistic Maturity	Art	3 yrs
Neuchâtel	Type G	General Culture	3 yrs
Vaud	Type X	Latin & Math	3 yrs
Zürich	*Lehrerinnenmatur*	Teaching Maturity	3½ yrs

The number of cantonal maturity certificates issued each year is no more than 10% of the total number of federal maturity certificates issued. The Cantonal Maturity Certificate leads to selected faculties of a university of the same canton, or of another canton with which there is an intercantonal agreement, and may be accepted by universities of other cantons (at the universities' discretion). It is never accepted for admission to dentistry, food chemistry, medicine, pharmacy, or veterinary medicine.

In French-speaking cantons, the student may receive both a Federal Maturity Certificate and an additional cantonal diploma known as a *Bachelier* (Bachelor's) or a *Baccalauréat* (Baccalaureate). This diploma will show the type of maturity program the student followed. The practice of awarding such an additional diploma is a local custom and does not indicate any further academic work. See Document 4.

A Cantonal Maturity Certificate will be headed by the name of the canton. Also included will be the name of the school, the name of the student, the student's birthplace and birthdate, and the type of maturity program. It will be signed by the school director and the Director of the Department of Public Instruction. No references to the Swiss Confederation or the federal maturity ordinance will appear. The subjects and the examination results do *not* usually appear on the certificate. They are available in a separate document.

A different type of cantonal certificate is also provided as the leaving certificate for programs in the arts, commerce, or pedagogy, since no federal certificate is available in these fields. These certificates will indicate the area of study, and no "type" will be shown. (See sections on arts and commerce, Chapter IV, and Chapter III for pedagogy.)

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2. All require the same number of years' study as the Federal Maturity programs in the same canton, with the exception of Aargau where the Federal Maturity program is one year longer than Type PSG. In Basel-Landschaft there is also a 3-year Type M *Diplom*. In Zürich there is a primary teacher training credential program in the *Oberseminar* which requires 5 years. The *Lehrerinnenmatur* is not a teaching credential.

CONFÉDÉRATION SUISSE
RÉPUBLIQUE ET CANTON DE NEUCHÂTEL

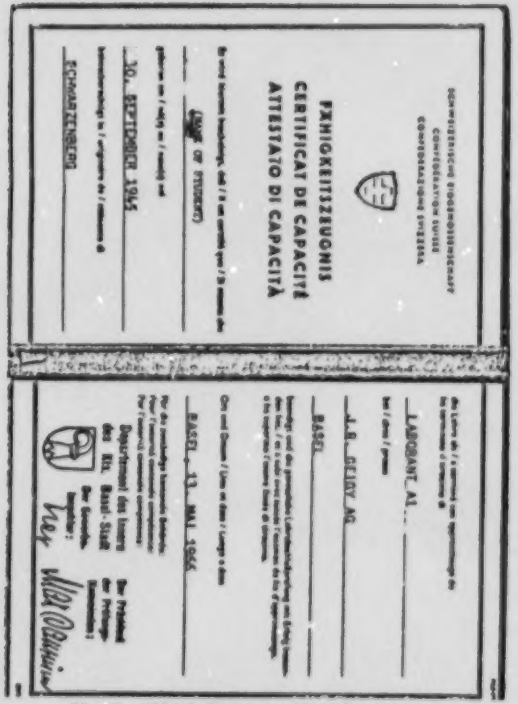
LE GYMNASE CANTONAL DE NEUCHATEL

BACHELIER ÈS SCIENCES

Neuchâtel, le 7 juillet 1977

Le directeur du Gymnase cantonal. Le Conseiller d'Etat, chef du département de l'instruction publique.

No. 4. *Bachelier* (Cantonal Maturity Certificate, French-speaking area)



FÄHIGKEITSZEUGNIS
CERTIFICAT DE CAPACITÉ
ATTESTATO DI CAPACITÀ

LAUFBANT AG

J.R. GEIGY AG

BASEL

BASEL, 13. MAI 1966

No. 5. *Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità*

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Vocational Upper Secondary Programs

Vocational upper secondary programs, designed to train students for specific vocations, enroll 75% of all Swiss students following completion of the 9 years of compulsory education. Vocational training is regulated by federal authority, and the government has established criteria for almost 300 occupations. The implementation of vocational training regulations is delegated to cantonal authorities. Almost every occupation, from domestic service to watchmaking, requires a federal Certificate of Proficiency *(Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità)*.

The principal vocational areas not covered by federal laws are teacher training (Chapter III), music (Chapter IV), paramedical professions (Chapter V), and social welfare (Chapter IV). Vocational training in these areas is under cantonal control and is often delegated by the cantons to professional associations (e.g., the Confederation of Swiss Physicians regulates the training of medical assistants).

There are four types of vocational upper secondary programs: apprenticeships with part-time school, teaching workshops, workshop schools, and fulltime schools.

Apprenticeships

At the vocational upper secondary level, 89% of the students are enrolled in part-time programs, since the major emphasis is on inservice experience. Pupils entering this type of program have an apprenticeship contract, subject to cantonal approval, signed by an employer (either a public or private firm) and the parents of the student. The contract is for a specific number of years (a minimum of two), and there are stated penalties if the apprentice abandons the program after a trial period.

Apprenticeships include a certain amount of part-time school classwork, usually one day a week for a total of 320 hours a year. The apprentice attends a central communal school, usually called "Technical School" *(Gewerbeschule* or *Gewerbliche Berufsschule/Ecole Professionelle/Scuola professioni)*. There are other designations for technical schools (see Appendix A). The curriculum includes courses in native language & literature, commercial law, correspondence & business, and civics & economics, as well as technical courses related to a specific vocation. The central communal school offers classes at different hours for different types of apprenticeship training.

An apprenticeship lasts from 2 to 4 years, depending on the complexity of the vocational training required. At the end, the student takes the exam for that vocation and, if successful, receives a federal Certificate of Proficiency (see Document 5). The certificate is issued by cantonal authorities for the federal government. It certifies the individual as qualified for employment in a particular field anywhere in Switzerland. It does *not* state the length of training completed which may be as short as 2 years. A student can also obtain a transcript of grades received in the apprenticeship exam, which is known as the *Lehrabschlussprüfung/Examen de fin d'apprentissage/Esame di fine tirocino)*.

The grading scale is 6-1, with 6 the highest. A Certificate of Proficiency does not entitle the holder to admission to any university, but can lead to admission to certain tertiary level institutions, in particular a higher technical school, which is usually referred to as a Higher School of Engineering *(Höhere Technische Lehranstalt/Ecole Technique Supérieure/Scuola Tecnica*

Superiore), or to a Higher Economics and Business Administration School *(Höhere Wirtschafts- und Verwaltungsschule)*.

Higher Vocational School. In the 1970s, a number of vocational upper secondary schools added higher vocational school programs *(Berufsmittelschule/Ecole professionnelle supérieure/Scuola media professionale)* to provide gifted apprentices with more extensive academic training beyond the compulsory instruction. There are now 24 such schools, with a total enrollment of approximately 4,000 (about 3% of all apprentices). The students attend these classes for one additional day per week for 6 semesters. In 1978, these programs had a total of 2 artistic sections, 3 general sections, and 23 technical sections.

Students in higher vocational programs are required to study two languages (their own plus a second official Swiss language or English) and contemporary history. They may choose additional work in accounting, biology, chemistry, commercial arithmetic, design, draftsmanship, economic geography, environment, film, foreign language, geography, gymnastics & sports, history of art, management & law, math, and typewriting.

Students completing a higher vocational school program are much better prepared for admission to specialized institutions of higher education in technical studies than those who complete only the compulsory vocational school courses. However, they receive only the same federal Certificate of Proficiency in their field as students who do not complete the additional program. The only documentation provided for the higher vocational school program is additional entries in the student course book and possibly a *Berufsmittelschuldiplom* (Higher Vocational School Diploma) or a *Baccalauréat technique* (Technical Baccalaureate).

Patterns of Training. Most students follow the upper vocational training pattern which combines inservice training as an apprentice in an office, commercial firm, or factory with one or two days attendance at a central school. There are two other types of vocational programs, in both of which the students while under apprenticeship contract spend all their time in one location, completing their practical, theoretical, and general educational training. These are (1) teaching workshops *(Lehrwerkstätte/Ecole de métiers/Scuola cantonale d'arti e mestiere)*, fulltime schools operated by industries or by a canton or city to train apprentices for particular vocations, e.g., plumbing or tailoring. There are about 40 such schools, 35 of which are in the French-speaking area. (2) workshop schools *(Werkschule/Ecole atelier)*, operated by large companies to educate future employees. There are 12 such schools, none in the Italian-speaking region.

On completion of training in either of these fulltime programs, the student takes the proficiency exam for the vocation involved in order to obtain a Certificate of Proficiency. There is no distinction among certificates obtained from a teaching workshop, workshop school, or from the regular apprenticeship training program.

NOTE: The proficiency exam and the Certificate of Proficiency are also open to older persons who have not followed the prescribed training if they have worked in the trade for at least twice the length of an apprenticeship.

Fulltime Upper Secondary Vocational Programs

Fulltime upper secondary vocational education without an apprenticeship is available in a limited number of fields, primarily in the areas of the arts

and in commercial studies. Part-time vocational studies may often be offered in the same school.

Arts. There are a number of schools specializing in upper secondary vocational programs in the artistic fields, many of which require 3-4 years of fulltime study varying with the specialization. Schools offering these programs are usually known as *Kunstgewerbeschule* (art technical school), *Ecole des Beaux-Arts* (school of fine arts), or *Centro scolastico per le industrie artistiche* (scholastic center for the artistic industry). For the names of these schools and placement recommendations concerning their students, see the section on art, Chapter IV.

Commercial Studies. There are numerous fulltime commercial schools, both cantonal and private, known usually as *Handelsschule/Ecole supérieure de commerce/Scuola di commercio*. The course of study in these schools leads either to a cantonal Commercial Maturity Certificate, if the school has cantonal recognition and the program requires 4 years, or to a school diploma, if at a school without cantonal recognition or for completion of a 3-year course. The student may take the exam for a federal Certificate of Proficiency in the commercial area as well. For placement recommendations, see section on business administration, Chapter IV.

Music. There are many conservatories offering upper secondary specialized music training in fulltime 3- to 4-year programs. For the names of the schools and placement recommendations, see section on music, Chapter IV.

General Education Continuation Upper Secondary Schools

There are a few (approximately 30) cantonal general education continuation upper secondary schools which offer 1-3 years of further schooling in general education subjects including language, history and Swiss political problems. The names of this type of school are included in Appendix A. Such a school is often referred to as a "Diploma Middle School" *(Diplommittelschule/Ecole de Culture Générale/Scuola Cultura Generale)*.

These schools were established to provide more general education for girls who did not plan to enter an academic secondary program, but who wished to continue study or needed additional preparation as a prerequisite for programs in traditionally female careers such as domestic science, kindergarten teaching, paramedical professions, and social welfare. The schools, which enroll little more than 1% of the upper secondary school population, are now mostly coeducational, but the enrollment ratio of girls to boys is 10 to 1.

In addition to cantonal schools of this type, there are numerous private schools (enrolling about 3% of the upper secondary population) offering general education courses, often with a particular emphasis on language and/or commercial studies.

The diploma awarded by the general education continuation school is rarely accepted for admission to a Swiss university.[3] It is exclusively a prerequisite certificate for the careers mentioned above, or a terminal certificate. It was previously recognized only by the town or canton in which the school was located, but the Concordat of 1970 provides for intercantonal recognition.

3. One of the best known of the cantonal general education programs is offered by a section of the Collège de Genève. This school awards a Diploma of General Culture *(Diplôme de culture générale)* on completion of a 3-year program. The diploma is accepted for admission to a number of tertiary university programs.

Placement Recommendations

Educational Background of Students from Switzerland	Placement Recommendations for U.S. Admissions Officers
A. Primary and Lower Secondary School	May be placed in primary or secondary school on a year-for-year basis.
B. Upper Secondary School Certificates*	
1. a. Students who have completed part of an upper secondary program	May be placed in high school on a year-for-year basis.
b. Students who have completed at least grade 12 of a maturity certificate program but have not received a certificate	May be considered for freshman admission where this amount of education is considered sufficient preparation.
2. Federal Maturity Certificate *(Maturitätszeugnis/Certificat de Maturité/Attestato di Maturità)*	May be considered for freshman admission with the possibility of 4-8 semester hrs of advanced standing credit for each subject listed at double value on the Federal Maturity Certificate grade report, based on syllabus review or exam. (See pp. 9-17.)
3. Cantonal Maturity Certificate *(Kantonale Maturität/Maturité cantonale†/Maturità cantonale)*	May be considered for freshman admission.
4. Certificate of Proficiency *(Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità)*	
a. awarded after 2 yrs training	Primarily a vocational qualification; may be placed in grade 10 or 11, based on review of program content.
b. awarded after 3 or 4 yrs training	May be considered for freshman admission where vocational training is considered appropriate preparation.
5. Diploma *(Diplom/diplôme/diploma)* from a general education continuation school *(Diplommittelschule/Ecole de Culture Générale/ Scuola Cultura Generale)*	
a. awarded on completion of a 1- or 2-yr program	May be placed in high school on a year-for-year basis.
b. awarded on completion of a 3-yr program	May be considered for freshman admission where a general (not university preparatory) background is considered appropriate preparation.
6. *Berufsmittelschuldiplom/Baccalauréat technique* (vocational middle school diploma/technical Baccalaureate)	May be considered for freshman admission where vocational training is considered appropriate preparation.

*For placement recommendations for art, commercial, and teaching certificates, see sections of book where such programs are discussed.

†In French-speaking cantons, the Cantonal Maturity Certificate may be called the *Baccalauréat* or the *Bachelier*. Some students may also receive both a *Baccalauréat* and a Federal Maturity Certificate; this does not represent completion of additional academic work.

Chapter III

Teacher Training

Teacher training for all but physical education and vocational education teachers is the responsibility of the cantons, which determine admissions requirements and training regulations, define courses of study and examination requirements, and provide certification. Teacher education is offered at both the secondary and tertiary levels; in some programs, the secondary level program extends into tertiary level.

Kindergarten Teachers

In all cantons, except Genève and Neuchâtel, training for kindergarten teachers is usually at the upper secondary level, though there is a trend toward advancing the training to tertiary level.[1] In Genève, a secondary school maturity certificate followed by a 3-year tertiary course in the cantonal teacher training institute is required. In Neuchâtel, a secondary school maturity certificate followed by a 2-year course in the cantonal normal school is required. In the populous German cantons of Basel-Stadt and Zürich, students who wish to enter kindergarten teaching are required to have completed at least a 3-year general education continuation school program before entrance. However, the training is considered secondary level by the Swiss. In most other cantons the student, after 9 years of compulsory school, either enters immediately into *Kindergärtnerinnenseminar* (kindergarten seminar), *Ecole normale pour maîtresses enfantines* (normal school for kindergarten teachers), or *Scuola magistrale: tipo C* (normal school: type C) *or* attends a general education continuation school for one or two additional years, or does a year of practical work in a children's home, day nursery, or with a family, before entering a kindergarten training school.

The kindergarten teacher training programs require an entrance exam which includes drawing, gymnastics, handicrafts, and singing. The programs are 2-3 years in length, depending on the canton. Work in child psychology, handicrafts, music, and sociology is included. The certificate awarded is the *Fähigkeitszeugnis für Kindergärtnerinnen/Brevet d'enseignement de maîtresse enfantine/Patente di Maestra d'asilo*. The certificate never gives eligibility for university admission.

1. The Ecole d'Educatrices/Educateurs de la Petite Enfance in Lausanne, Canton Vaud, offers a kindergarten teacher training program which requires completion of upper secondary studies (maturity or diploma programs) and is open only to those 18 or over. The 3-year program leads to a *Diplôme*. However, the canton's standard requirement for kindergarten teachers is only a 3-year program entered immediately after 9th grade.

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Primary School Teachers

Training for primary school teachers (grades 1-4, 1-5, 1-6, depending on the canton) is offered in all cantons, except Aargau, Basel, Genève, and Neuchâtel, in institutions known as *Lehrer(innen)seminar* (teaching seminar),[2] *Ecole normale* (normal school), or *Scuola magistrale* (normal school). The programs are 4 or 5 years long, depending on the canton. The student enters directly from the 9-year compulsory school period.

Five-year primary teacher training programs occur most frequently in German-speaking cantons and are usually divided into two sections: *Unterseminar* (lower seminar), a 3- or 3½-year program which offers secondary level general education,[3] and *Oberseminar* (upper seminar), a 1½- to 2-year program which concentrates on pedagogical training. Holders of maturity certificates may enter the *Oberseminar* directly and complete primary school teacher training in 1½ to 2 years' additional study.

All primary school teacher training programs include work in arts, biology, chemistry, handicrafts, history, languages (one to three), literature, mathematics (arithmetic, algebra, elementary calculus, geometry), music, physical education, physics, political science, and psychology.

The cantons of Aargau, Basel[4] (including both half cantons), Genève, and Neuchâtel require primary school teachers to complete a full academic secondary school program with a federal or cantonal Maturity Certificate and then enroll in a cantonal postsecondary program, which requires 2 years in Aargau, Basel, and Neuchâtel, and 3 years in Genève.

The canton of Aargau maintains a special institute for teacher training known as the Higher Pedagogical Establishment (Höhere pädagogische Lehranstalt, HPL), which has two branches, one in Aargau and one in Baden. The Maturity Certificate (either cantonal or federal) is required for admission. The 2-year program leads to the Certificate as Teacher in Aargau Primary Schools *(Wahlfähigkeit als Lehrer der aargauischen Primarschule)*. Aargau is unique in also having 4 or 5 "gymnasiums" which emphasize prepedagogical studies exclusively. They are known as Pedagogical-Social (Pädagogisch-sozio, PSG) Gymnasium. On graduation, after 3 years of an academic secondary program, the student receives a cantonal Maturity Certificate and enters the HPL to complete training for primary school teaching. (Graduates from federal maturity gymnasium programs in Aargau are required to complete 4 years.)

The 2-year HPL program has two sets of exams. At the end of the first year there is a *Zwischenprüfung* (intermediate examination) on didactics, pedagogy, and pedagogical psychology. At the end of the second year, there is a *Schlussprüfung* (final examination), including pedagogy, pedagogical psychology, and practical teaching plans, as well as two subject exams in the candidate's teaching specialties. The subjects may be selected from the following: biology, drawing & painting, German, history, mathematics, music, and sports.

Grading is on a 6-1 scale. Descriptive grades are also used. The grades and the suggested U.S. equivalent are as follows: 6, *sehr gut*—A; 5, *gut*—B;

2. *Lehrer*, male teacher; *Lehrerin*, female teacher.
3. Offered in the general cantonal upper secondary academic school *(Kantonsschule)* or in a separate institute.
4. In Basel, the primary school teacher training institute is known as Kantonales Lehrerseminar Basel.

4, *genügend*—C; 3, 2, 1, *ungenügend*—F. The grades in music and sports will be either "*erfüllt*" or "*nicht erfüllt*" (satisfactory or not satisfactory).

Students who do not pass the *Schlussprüfung* receive an *Abgangszeugnis* (leaving certificate), which does not give teaching certification.

Primary teacher training in Neuchâtel is offered in the *Ecole Normale: section primaire* and requires 2 years of postsecondary study.

Primary teacher training in the canton of Genève is under the direction of the cantonal Department of Education and is known as "pedagogical studies" *(les études pédagogiques)*. The first year of the 3-year program is spent half in coursework and half in practice teaching. The courses are taught by experienced teachers appointed by the canton. In the second year, studies are devoted entirely to courses taken by special arrangement in the Faculty of Psychology and Education *(Faculté de psychologie et d'éducation)* of the University of Genève. Seven credits (one course equals one credit) must be obtained. In the final year, the student, under close supervision, has responsibility for a class.

The certificate indicating qualification as a primary school teacher is known in German by several designations: *Fähigkeitszeugnis für Elementarlehrer* (Proficiency Certificate for Elementary Teacher), *Lehrerpatent* (Teacher's Certificate), *Primarlehrerpatent* (Primary Teacher's Certificate), or *Wahlfähigkeit als Lehrer* (Certificate as a Teacher). Some German-speaking cantons issue a provisional certificate *(Provisorische Wählbarkeit)* which is followed after a period of teaching experience by a final certificate, the *Definitive Wählbarkeit*. In the French-speaking regions, the certificate of primary school teaching is the *Brevet d'enseignement primaire*. In the Italian-speaking regions it is the *Patente di Maestro di Scuola Elementare*.

Secondary School Teachers

Education for all teaching beyond primary grades is offered either in the universities or in separate tertiary teacher training institutes. Students from the Italian-speaking regions must attend a French or German language program, as no such training is offered in the Italian-speaking canton of Ticino.

All secondary teacher training programs require the student to present specialization subjects. They also require substantial periods of practice teaching.

A distinction is regularly made in German-speaking cantons between training for lower secondary teaching (grades 5-9) and upper secondary teaching (grades 10-13).

Lower Secondary Teachers

Certification as a teacher for lower secondary school is open both to those with a Maturity Certificate and to those with a Primary Teaching Certificate. Those with the latter and several years' teaching experience may attend teaching seminars, which vary in length depending on the canton, to obtain the higher credential of Lower Secondary School Teacher (known variously as *Bezirkslehrerdiplom/Mittellehrerdiplom/Oberschullehrerdiplom/Reallehrerdiplom/Sekundarlehrerdiplom)*. Students who hold the Primary Teaching Certificate generally are also accepted for admission to university lower secondary

teaching programs without further teaching experience. The number of hours per week required in the lower secondary teaching programs ranges from 29 to 35.

The teaching seminar programs leading to credentials for lower secondary school teachers are as follows:

Canton	Seminar Program	Length of Study (semesters, weeks)
Aargau	Lehramtsschule für Oberstufenlehrer	1 sem (20 wks)
Basel-Stadt	Lehrerseminar Liestal (since 1979)	3 sems
Basel-Landschaft	Lehrerseminar Liestal	3 sems (prior to 1979 only 12 wks)
Glarus	Real- und Oberlehrerseminar Zürich	2 yrs
Solothurn	Lehramtskurs an Solothurner Lehrerbildungsanstalt	1 sem (20 wks)
St. Gallen	Pädagogische Hochschule für die Sekundar- und die Reallehrerausbildung	3 sems
Zürich	Real- und Oberlehrerseminar Zürich	4 sems
Freiburg (German section), Luzern, Nidwalden, Obwalden, Schwyz, Uri, Zug	Interkantonale Oberstufenkonferenz (IOK) (under intercantonal direction of the cantons listed)	34 wks fulltime study over 4-yr period; 3-4 wks during school yr; 3-5 wks during vacation.

The German-speaking cantons of Appenzell (both halves), Graubünden, Schaffhausen, and Thurgau accept the training of any of the above programs. In the canton of Bern no separate lower secondary teacher training program exists outside the university. The period of study for the secondary teaching credential in the teaching seminars is shorter than that of the universities because the seminar students have already had a period of pre-admission practice teaching.

For students who have completed academic upper secondary programs with a Maturity Certificate, teacher training for both lower and upper secondary programs exists in the universities and in teacher training institutes. Holders of a Primary Teaching Certificate are admitted to most universities after passing an entrance exam. For lower secondary teaching, the program varies from 5 to 6 semesters of university or institute study to completion of a full 4-year first degree, again depending upon the canton.

The university programs leading to lower secondary school teaching credentials are as follows:

Institution	Length of Study (semesters)	Degree
Universität Basel	6 semesters university study + 2 semesters practice teaching & pedagogical training in the *Kantonales Lehrerseminar*	*Mittellehrerdiplom*
Universität Bern	8 semesters	*Berner Sekundarlehrerpatent*
	7 semesters (for French part)	*Brevet d'enseignement secondaire*
Universität Freiburg	5 semesters (German part) 5 semesters (French part)	*Sekundarlehrerdiplom* *Diplôme de l'enseignement secondaire*

Universität Zürich	5 semesters (for entry with *Primarlehrerpatent*)	*Fähigkeitsprüfung für Sekundarlehrer* or
	6 semesters (for entry with Maturity Certificate)	*Fähigkeitsprüfung für Fachlehrer auf Sekundarschulstufe*
St. Gallen Pädagogische Hochschule für die Sekundar- und die Reallehrerausbildung	7 semesters (prior to 1980 only 5 semesters)	*Sekundarlehrerpatent*

In French-speaking cantons, except for Neuchâtel, no distinction is made between training for lower and upper secondary teacher training. The first university degree (*Licence* or *Diplôme en pédagogie*) is required for both levels. This must be followed by a one- or two-year advanced pedagogical course, which includes both coursework and practice teaching, regulated and supervised by the cantonal office of education. The certificate is known variously as the *Brevet d'enseignement secondaire, Brevet d'aptitude pédagogique, Certificat d'aptitude à l'enseignement secondaire*, or *Certificat d'aptitude pédagogique*.

In the canton of Neuchâtel only, a 6-semester program, of which 4 semesters are spent in university studies and 2 in pedagogical training, leads to the *Brevet pour l'enseignement du degré secondaire inférieur* (or if the recipient holds a *Licence* as well to the *Certificat d'aptitude pédagogique*).

Upper Secondary Teachers

Upper secondary academic school teachers are required by all cantons to complete a university first degree program. There are cantonal variations for completion of eligibility for certification.

The German-speaking cantons require little or no additional pedagogical training, but rather a pedagogical exam. Four of the five German universities (Bern, Freiburg, Zürich, and ETHZ) require an 8-semester program which leads to a degree known variously as the *Diplom für das Höhere Lehramt, Gymnasiallehrerdiplom*, or *Patent für das Höhere Lehramt*. At the Universität Basel, the program requires 9 semesters and leads to the *Oberlehrerdiplom*.

The French-speaking cantons require either one additional year beyond the first degree, the *Licence* (Vaud, Neuchâtel), or 2 additional years (*Genève*). The credential is usually known as the *Diplôme de Maître de Gymnase*.

Special Subject Teachers

Art Teacher (*Zeichenlehrer/Maître de dessin*). Training is at the tertiary level in a professional art school. All programs require 8-10 semesters beyond the Maturity Certificate. (See section on art in Chapter IV.)

Business Administration/Commerce Teachers. Training to become a teacher in a cantonal commercial school is offered in the German-speaking universities of Basel, Bern, Freiburg, Zürich, and the Hochschule St. Gallen. The business administration teaching diploma requires 8 semesters, plus a period of practice teaching. The degree is known variously as *Handelslehrerdiplom* (Basel), *Handelslehrerpatent* (Bern), *Magister oeconomiae* (St. Gallen), *Handelslehrerdiplom* or *Diplôme de maître de gymnase socio-économique* (Freiburg), *Diplom für das Höhere Lehramt in den Handelsfächern* (Zürich). The student may take a degree in economics or prepare specifically for the profession of commercial teacher. The pedagogical degree may be obtained in addition to the first university degree and indicates the completion of supplementary study and

cantonal examinations in accounting, pedagogy, and teaching methods. The French-speaking universities do not offer a special teaching degree in this area.

Handicraft Teacher. This training exists as a separate specialization in German-speaking cantons in special seminars known as *Arbeitslehrerinnenseminar* or *Handarbeitslehrerinnenseminar* (Handicraft Teacher Seminar). In French-speaking cantons, limited programs exist in the regular normal school, *Ecole normale*, in a section known as *Section ouvrages manuels*. In the Italian-speaking canton of Ticino, students attend the *Corso magistrale di sartoria*. All programs are entered either directly after the completion of the 9 years of compulsory schooling or after 1 or 2 years in a general education continuation school or of practical experience, and are 2-4 years in length. The certificate of *Handarbeitslehrerin* or *Maîtresse pour les ouvrages manuels* does not give university admission.

Home Economics Teacher. Home economics teacher training is vocational, is at the upper secondary level, and leads to a cantonal certificate. The training is offered in separate seminars or separate sections of normal schools, known as *Hauswirtschaftslehrerinnenseminar* or *Haushaltungslehrerinnenseminar/Ecole normale: section ménagère/Scuola Magistrale: economia domestica*. The programs require from 2 to 4 years and may be entered directly from the 9-year compulsory school or after study in a continuation school. The certificate of *Hauswirtschaftslehrerin/Maîtresse ménagère/Maestra di economia domestica* does not give university admission.

Music Teachers. Music teachers, both for professional instruction on instruments and voice and for school programs in music, are trained in the music departments of several universities and separate music conservatories. Most training for teachers of music in schools requires 8 semesters beyond the Maturity Certificate. (See section on music, Chapter IV.)

Physical Education Teachers. Training for physical education teachers is considered vocational training and is regulated by the Military Department of the Swiss Confederation which confers the degrees. Programs are offered at the Universität Basel, the Universität Bern, Université de Genève, Université de Lausanne, Eidgenössische Technische Hochschule Zürich, and a special federal institute, Eidgenössische Turn- und Sportschule Magglingen.[5]

There are three degrees in the field; two are offered in university programs and one in the special institute. It is possible to include the study for the two physical education degrees granted at the universities and at the Eidgenössische Technische Hochschule Zürich with another university degree, either in an academic field or in a teacher certification program.

- *Eidgenössisches Turn- und Sportlehrerdiplom I/Diplôme de maître d'éducation Physique, Diplôme fédéral No. I* (Federal Gymnastics Physical Education Teacher's Diploma, Level I). Qualifies for teaching in grades 1-9. Requires 4 fulltime or 6 part-time semesters and includes theoretical studies in pedagogy and sports, practice teaching and training in various sports. Some universities are increasing the length of study to 6 fulltime semesters. Admission requires Federal, Cantonal, or Commercial Maturity Certificate, or Primary Teacher's Certificate, in addition to extensive exam in physical education skills.
- *Eidgenössisches Turn- und Sportlehrerdiplom II/Diplôme de maître de gymnastique, Diplôme fédéral No. II* (Federal Gymnastics Physical Education Teacher's Diploma, Level II). Qualifies to teach at the upper secondary level (grades 10-13). Requires 2 semesters beyond Level I diploma described above and is offered only at the Universität Basel,

5. The publication *Turn- und Sportlehrerausbildung in der Schweiz: Informationsschrift* is available from Eidgenössische Turn- und Sportschule, Magglingen, 2532 Magglingen, Switzerland. It describes (in German) the details of each program. It would be useful also to non-German readers, as the format makes the descriptions quite easy to follow.

Universität Bern, and Eidgenössische Technische Hochschule Zürich. Program includes further pedagogical, social science, and physical education skills training, as well as practice teaching in grades 10-13. Thesis required.

- *Sportlehrerdiplom ETS/Diplôme de l'Ecole Supérieur Fédérale de Gymnastique* (Sport Teacher Diploma). Tertiary non-university diploma offered only by Eidgenössische Turn- und Sportschule, Magglingen.[6] (The only official sports school of Switzerland, it is under the jurisdiction of the Swiss Military Department.) Program of 4 semesters, 15 weeks each. Open to new students only every other year. Applicants must be 18, have good character, good health, and a good "general education." No upper secondary schooling required. Knowledge of both French and German and possession of good sports skills expected. Graduates may teach physical education in vocational schools, private schools, business, health and hotel programs, and private fitness institutes. Certificate of Proficiency as an instructor in a specific sport may also be obtained. The facilities at Magglingen/Macolin are used for the intensive sports training required by all the university programs.

  The program is divided into 3 general areas: sports theory, sports subjects, and sports weeks and camps. Academic subjects include biology (2 sems, 4 hrs), psychology (2 sems, 2 hrs), sociology (1 sem, 2 hrs), pedagogical training (4 sems, 30 hrs). The rest of the program is directly related to sports training.

Special Education Teachers

Special education teacher training has several levels of certification, ranging from vocational programs for assistants in homes for the physically or mentally handicapped to advanced university degrees.

Special Education Vocational Programs. Vocational programs leading to a cantonal Diploma as Institution Educator *(Diplom als Heimerzieher(in)* or *Diplom als Heilpädagoge/Diplôme d'éducateur specialisé)* generally require that the student be at least 18 or 19 years of age, have completed 12 years of schooling which may include a 3-year apprenticeship, and have had half a year's practical experience in an institution before admission. Most programs require 3 years and include pedagogical training and practical experience.

Special Education University Programs. Training in various aspects of special education is offered at several universities, or in institutes attached to universities. They are listed below with brief descriptions of the programs.

1) Universität Basel, Institut für spezielle Pädagogik und Psychologie (ISP), Münzgasse 16, 4051 Basel. Est 1970. Admission: Primary School Teacher's Certificate or Maturity Certificate, several years of teaching experience, and recommendation from school principal where teaching was done. Several degrees are offered:

   Heilpädagogisches Diplom (Handicapped Education Diploma)—4 semesters of fulltime study or 8 semesters of part-time study. Diploma has cantonal recognition. Not the equivalent of a university first degree. Considered a "practical" diploma, it may be taken as part of a 4-year first degree program in another field. The diploma permits the holder to teach mentally retarded and/or emotionally disturbed children in special classes.

   Logopädisches Diplom (Speech Therapy Diploma)—6 semesters of coursework and 1,000 hours of practical teaching. Diploma has cantonal recognition.

   Diplom in Orthodidaktik des Lesens (Diploma in Special Methods of Teaching Reading)—50-hour course, and internship. Specialization diploma open to certified teachers only; not a first degree.

6. Magglingen is the German name and Macolin the French name for the same town. The school may be referred to as being located in Macolin.

2) Universität Freiburg, Heilpädagogisches Institut/Université de Fribourg, Institut de pédagogie curative, Place du Collège 21, 1700 Fribourg. Admission: the *Heilpädagogisches Diplom* program does not require a Maturity Certificate if applicant has had teaching experience. Other degree programs require the Maturity or recognized equivalent. Several degrees are offered:

Heilpädagogisches Diplom/Diplôme en pédagogie curative (Handicapped Education Diploma)—4 semesters, and 1 year of practical experience. Not the equivalent of a university first degree.

Diplom für Hilfs- und Sonderschullehrer/Diplôme de capacité pour l'enseignement specialisé (Diploma for Handicapped or Special Education)—4 semesters of coursework, plus 1 year of practical experience. Not the equivalent of a university first degree.

Diplom in Logopädie (Diploma in Speech Therapy)—4 semesters plus 1 year of practical experience (offered only in German). Not the equivalent of a university first degree.

Lizentiat in Heilpädagogik/Licence en pédagogie curative (Licentiate in Handicapped Education)—8-semester first-degree program.

Doktorat in Heilpädagogik/Doctorat en pédagogie curative (Doctorate in Handicapped Education). Requires a number of years of study beyond the first degree, and submission of research dissertation.

3) Université de Genève. Programs in handicapped education are offered in the *Faculté de psychologie et des sciences de l'éducation* (Faculty of Psychology and Education Science). All are first-degree programs, 8 semesters in length, with standard requirements of the University's first degree. They lead to the *Licence en pédagogie, option éducation des handicapés* (Licentiate in Pedagogy, major in handicapped education) or the *Licence en pédagogie, option psychopathologie du language et logopédie* (Licentiate in Pedagogy, major in psychopathology of language and speech).

Graduate work beyond the *Licence* is also offered. A 4-semester post-*Licence* program leads to the *Diplôme en pédagogie avec spécialisation* (Diploma in Pedagogy with specialization). A 6-semester, post-*Licence* program leads to the *Docteur en pédagogie, éducation des handicapés*. The traditional doctorate requiring a research thesis can also be obtained at the University.

Vocational Teachers

Training for certification as a vocational teacher in an upper secondary vocational school *(Gewerbeschule/Ecole professionnelle/Scuola professionale)* requires specialized study offered only at the Swiss Institute for Vocational Pedagogy *(Schweizerisches Institut für Berufspädagogik/Institut suisse de pédagogie pour la formation professionnelle)*, Morgartenstrasse 2, 3014 Bern.

Established in 1972, the Institute offers two types of training. One type leads to certification as a teacher of vocational subjects. To be admitted to this program, an applicant must be at least 24 years old, have a diploma from a higher school of engineering and have at least 2 years of post-degree vocational work experience. The program, which includes psychology, pedagogy, and practice teaching, is 2 to 3 semesters in length, depending on the particular study course.

The second type of training leads to certification as a teacher of general subjects in a secondary vocational school. Applicants must be at least 24 and have a teacher's certificate for at least primary level. Those who hold any university degree, including the 2-year physical education diploma, may also be admitted. The course of study requires a total of 4 semesters (2,006 hours) and includes vocational studies, practical training, business administration

(correspondence & bookkeeping), civics, economics, German, law, math, pedagogy, philosophy, and psychology.

Both programs lead to the *Diplom als Gewerbelehrer(in)/Diplôme pour l'enseignement dans l'école professionnelle*. The diploma will indicate whether the teacher certification is for vocational subjects or general subjects.

Teachers for upper primary vocational classes, usually grade 9, hold the required lower secondary credentials and have completed 1 or 2 semesters of additional training to qualify for the certificate of *Abschlussklassenlehrer, Berufswahlklassenlehrer, and Werklehrer*.

Continuing Education for Teachers

A regular program of continuing education for teachers is regulated by the Swiss Conference of Cantonal Directors of Public Education and is offered at the Swiss Center for Further Study for Secondary School Teachers (*Schweizerische Zentralstelle für die Weiterbildung der Mittelschullehrer/Centre suisse pour le perfectionnement des professeurs de l'enseignement secondaire/Centro Svizzero per il perfezionamento degli insegnanti delle scuole secondarie*), Guggistrasse 7, 6000 Luzern 4. The center was established in 1968. Short courses, 3 or 4 days, are offered in many subjects. Special theme weeks are also sponsored. Several thousand teachers participate annually. No additional academic credit is given for these in-service training courses in Switzerland.

Placement Recommendations

Educational Background of Students from Switzerland	Placement Recommendations for U.S. Admissions Officers
A. Kindergarten Teaching Certificates	
1. *Fähigkeitszeugnis für Kindergärtnerinnen/Brevet d'enseignement de maîtresse enfantine/Patente di Maestra d'asilo*	
a. awarded after a 2-yr program	May be placed in grade 12.
b. awarded after a 3-yr program	May be considered for freshman admission where teacher training at the secondary level is considered adequate preparation.
2. *Diplôme* from Ecole Educatrices/ Educateurs de la Petite Enfance	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
B. Primary School Teaching Certificates	
1. *Fähigkeitszeugnis für Elementarlehrer Primarlehrerpatent Lehrerpatent Wahlfähigkeit als Lehrer Wahlfähigkeit als Primarlehrer (without Provisorische or Definitive) Brevet d'enseignement primaire Patente di Maestro di Scuola Elementare*	May be considered for freshman admission.
2. *Brevet d'enseignement primaire*, Canton Genève	May be considered for undergraduate admission with transfer credit on a course-by-course basis.

3. *Brevet d'enseignement primaire,* Canton Neuchâtel	May be considered for undergraduate admission with transfer credit on a course-by-course basis.

C. Secondary School Teaching Certificates*

1. Certificates for lower secondary school teaching from teacher training seminars. (See p. 26 for list of programs.)	May be considered for undergraduate admission with transfer credit on course-by-course basis.
2. Certificates & Diplomas from University Programs for Lower Secondary Teaching (See also Individual University Descriptions.)	
Bezirkslehrerdiplom *Brevet d'enseignement secondaire inférieur* *Brevet pour l'enseignement du degré secondaire inférieur* *Diplôme de Maître de l'enseignement secondaire* *Diplôme de Maître d'enseignement secondaire inférieur* (Freiburg) *Fachlehrer auf Sekundarschulstufe* *Fachlehrerpatent* *Fähigkeitsausweis. . .* (in stated subject) *Fähigkeitsprüfung für Sekundarlehrer* or *Fähigkeitsprüfung für Fachlehrer auf Sekundarschulstufe* *Mittellehrerdiplom* *Reallehrerdiplom* *Sekundarlehrerdiplom* or *Sekundarlehrerpatent*	May be considered for undergraduate admission with transfer credit on course-by-course basis.
Berner Sekundarlehrerpatent†	May be considered for graduate admission with graduate transfer credit on a course-by-course basis.
3. Upper Secondary Teacher Credentials—University	
Diplom für das Höhere Lehramt *Gymnasiallehrerdiplom/Diplôme de maître de gymnase* *Oberlehrerdiplom* *Patent für das Höhere Lehramt*	May be considered for graduate admission with graduate transfer credit on a course-by-course basis.
4. Upper Secondary Credentials—Cantonal Credentials	
Brevet d'enseignement secondaire *Brevet d'aptitude pédagogique* *Certificat d'aptitude pédagogique* *Certificat d'aptitude à l'enseignement secondaire*	May be considered for graduate admission with no transfer credit.

D. Special Subject Teachers

1. Art Teachers	
Diplôme de Type B, Genève	May be considered for graduate admission.
Zeichenlehrerdiplom/Maître de dessin	May be considered for graduate admission.

*The different requirements for lower and upper secondary school teaching should be noted with particular care.

†The *Berner Sekundarlehrerpatent* is the only lower secondary school teaching preparation which requires the full 8 semesters of university study.

2. Business Administration/Commerce Teachers

Diplom für das Höhere Lehramt in den Handelsfächern *Handelslehrerdiplom/Diplôme de maitre de gymnase socio-économique* *Handelslehrerpatent* *Magister oeconomiae*	May be considered for graduate admission, with graduate transfer credit on a course-by-course basis.

3. Handicraft Teachers

Handarbeitslehrerin/Maitresse pour les ouvrages manuels	May be considered for freshman admission where teacher training at the secondary level is considered adequate preparation.

4. Home Economics Teachers

Hauswirtschaftslehrerin/Maitresse ménagère/Maestra di economia domestica	May be considered for freshman admission where teacher training at the secondary level is considered adequate preparation.

5. Music Teachers

Musiklehrerdiplom/Brevet or *Diplôme d'enseignement secondaire* (For numerous other designations, see Music, Chapter IV.)	May be considered for graduate admission with graduate transfer credit on course-by-course basis.

6. Physical Education Teachers

Eidgenössisches Turn- und Sportlehrerdiplom I/Diplôme de maitre d'education Physique, Diplôme fédéral No. 1	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
Eidgenössisches Turn- und Sportlehrerdiplom II/Diplôme de maitre de gymnastique (Dipl II).	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
Sportlehrerdiplom ETS/Diplôme de l'Ecole Supérieur Fédérale de Gymnastique	Primarily a vocational qualification. Placement should be based on other credentials.

7. Special Education Teachers

a. Diplomas Which Grant Undergraduate Admission

Diplom als Heilpädagoge *Diplom als Heimerzieher/Diplôme d'éducateur specialisé* *Heilpädagogisches Diplom/Diplôme en pédagogie curative* *Diplom für Hilfs- und Sonderschullehrer/Diplôme de capacité pour l'enseignement specialisé* *Logopädisches Diplom* *Diplom in Logopädie*	May be considered for undergraduate admission with transfer credit on course-by-course basis.
Diplom in Orthodidaktik des Lesens	May be considered for up to 4 semester hrs of undergraduate transfer credit.

b. Diplomas Which Grant Graduate Admission

Diplôme en pédagogie avec spécialisation *Lizentiat in Heilpädagogik* *Licence en pédagogie curative* *Licence en pédagogie, option éducation des handicapés* *Licence en pédagogie, option psychopathologie du language et logopédie*	May be considered for graduate admission with transfer credit on a course-by-course basis.

c. Doctoral Level	
Docteur en pédagogie, éducation des handicapés	May be considered to have a degree comparable to a Doctor of Education degree in Special Education from a U.S. institution.
Doctorat	May be considered to have a degree comparable to a Ph.D. from a U.S. institution.
Doktorat in Heilpädagogik/ Doctorat en pédagogie curative	May be considered to have a degree comparable to a Ph.D. in Special Education from a U.S. institution.
8. Vocational Teachers	
Abschlussklassenlehrer Berufswahlklassenlehrer, Werklehrer	May be considered for undergraduate admission with transfer credit on course-by-course basis.
Diplom als Gewerbelehrer(in)/Diplôme pour l'enseignement dans l'école professionnelle	May be considered for graduate admission.
9. Continuing Education Courses for Teachers	May be considered to have completed in-service training.

Chapter IV

Tertiary Education

Of those who complete academic upper secondary programs in Switzerland, 75% enroll in universities or in the federal institutes of technology; the others enroll in higher schools of engineering, higher schools of business administration, hotel schools, schools of social work, teacher training institutions, and other types of specialized tertiary institutions. Many programs which are offered by universities in the United States are offered in separate public or private institutions in Switzerland.

The Universities—General Description

There are seven universities under cantonal control, two federal institutes of technology, and one institution specializing in business, economics, and public administration under combined cantonal and city control. Plans for a new general intercantonal university to be known as "Zentralschweizerische Universität Luzern" were rejected by regional public vote in 1979.

Cantonal universities are general universities offering instruction in the arts, dentistry, humanities (letters), law, medicine, pharmacy, philosophy, sciences, social sciences, theology, and veterinary medicine. (Not all universities offer all areas of study.) Programs of study in engineering are not offered at the cantonal universities, but rather at the federal institutes of technology, which also offer degree programs in the sciences. Practical engineering instruction is offered in higher technical schools: *Höhere Technische Lehranstalt* (HTL)/*Ecole Technique Supérieure* (ETS)/*Scuola Tecnica Superiore* (STS), which are tertiary-level institutions but are not considered universities. These will be referred to as the higher schools of engineering.

Most universities were established by either Catholic or Protestant religious groups. Universität Basel was established by Pope Pius II in 1460. Universität Bern and Université de Lausanne were originally Protestant schools. Université de Fribourg remains the recognized center of higher education of the Roman Catholic Church in Switzerland and still receives substantial financial support from it. Université de Genève was established by the Protestant religious leader Calvin in 1559. Only Université de Neuchâtel, organized by a group of scholars, and Universität Zürich, established "By the Will of the People" in a public referendum in 1833, have secular origins.

There are no university-level institutions in the Italian-speaking canton of Ticino. Students from that region must select a German- or French-language institution if they wish to study in Switzerland.

Each university is divided into faculties which are comparable to schools and colleges at a United States university. The universities of the French-

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speaking region have organized courses in special disciplines, thus obviating the need to provide complete programs of study at each university.

Most universities have affiliated research institutes which may participate in teaching in university programs or offer their own undergraduate or graduate programs. Only institutes which regularly offer academic programs are included under the individual university descriptions below.

The libraries at all universities are extensive and reflect the many centuries of existence of these institutions. Laboratory facilities range from very adequate to outstanding. The laboratory facilities at Eidgenössische Technische Hochschule Zürich are among the best in the world.

The academic year is divided into two semesters known as the winter semester *(Wintersemester/Semestre d'hiver)* and the summer semester *(Sommersemester/Semestre d'été)*. The summer semester is a full academic term, not a short summer program. Courses which are similar to a U.S. summer session are known as vacation courses *(Ferienkurse/Cours de vacances/Corsi di vacanze)*. The university academic year is from late October to mid-July with a semester break in March.

General Admission Requirements

Any one of the five types of Federal Maturity Certificate, A, B, C, D, E, leads to admission to any faculty of any university or institute of technology. (Of all applicants, 70% present a Federal Maturity Certificate.) Dentistry, food chemistry, medicine, pharmacy, and veterinary medicine always require the Federal Maturity Certificate.

Cantonal Maturity Certificates may be accepted for admission in most other fields at the university of the same canton. Only 3% of the applicants present a Cantonal Maturity Certificate. Certain faculties of some cantonal universities accept another canton's maturity certificate. Additional entrance exams may be required in background subjects. Primary school teaching credentials are presented by 4% of the applicants and are accepted by certain university faculties. Kindergarten teaching certificates do not give eligibility for university entrance.

The holder of a non-Swiss secondary school certificate may be admitted to a Swiss university if the certificate is recognized as equivalent to a Swiss maturity certificate by the university to which application is being made. A list of generally recognized certificates from other Western countries is given in Table 5. The specific admissions credentials accepted by each university are given in the individual university descriptions below. All universities reserve the right to accept other credentials.

First Degree Programs

A student is admitted to a particular program of study. The programs are highly structured with few electives permitted. The required coursework will concentrate on the selected field. The first year usually includes general background coursework; in later years, study becomes increasingly specialized. General breadth requirements are not stressed. Programs in languages and literature offer the most opportunity for electives. The secondary school maturity examination program is considered by the Swiss to have already given the student a broad course of study.

Table 5. Foreign Secondary School Diplomas Generally Recognized for Admission to Swiss Universities

Austria: *Reifezeugnis* (Maturity Certificate), minimum of *befriedigend* (fair).

Belgium: *Certificat d'études moyennes supérieures* (Certificate of Superior Middle Studies) and a *Certificat d'aptitude à l'enseignement supérieur* (Certificate of Aptitude for Higher Study) with minimum average of 65% for last year of study.

Canada: *Diplôme d'études collégiales* (Diploma of College Studies), or Senior Matriculation Certificate plus one year at university, or Junior Matriculation Certificate plus 2 years at university.

Denmark: *Bevis for Studentereksamen* (Matriculation Certificate) with minimum average of 8.

Finland: *Ylioppilastutkintotodistus* (Secondary School Leaving Certificate), and certificate of matriculation to a Finnish university.

France: *Baccalauréat complet A, B, C, D, E* (Full Baccalaureate, Type A, B, C, D, E) with *mention "assez bien"* (with grade of fairly good).

Germany: *Reifezeugnis* (Maturity Certificate), with minimum of *befriedigend* (fair), or *Reformabitur* (reformed school leaving examination) plus admission to a German university.

Great Britain: **England and Wales:** General Certificate of Education (GCE) with 6 subjects of which 2 must be at Advanced Level ("A" level). **Northern Ireland:** Matriculation Certificate, University of Belfast Entrance Examination, or Ministry of Education Senior School Certificate. **Scotland:** Scottish Certificate of Education, A, B, C, with 3 subjects at Higher Grade.

Iceland: *Stúdentspróf* (Upper Secondary School Examination Certificate).

Ireland: Matriculation Certificate of a university or upper school or Department of Education Leaving Certificate with 6 subjects.

Italy: *Diploma di Maturità (Classica, Scientifica, or Linguistica)* (Maturity Diploma: Classical, Scientific, or Linguistic), with minimum average of 40 out of 60.

Liechtenstein: *Maturazeugnis* (Maturity Certificate) with a minimum average of *befriedigend* (fair).

Luxembourg: *Certificat de Maturité* (Certificate of Maturity) or *Certificat de fin d'études* (Certificate of Completion of Studies), with minimum average of 42 out of 60.

Netherlands: *VWO (Voorbereidend Wetenschappelyk Onderlys)* (Preliminary Scientific Education) or a *Getuigschrift* (leaving certificate) from a gymnasium with minimum average of 7 out of 10.

Norway: *Examen Artium* (Matriculation Certificate) with minimum of 4 out of 6.

Sweden: *Slutbetyg* (School Leaving Certificate) with minimum of 4 out of 5, and certificate of admission to a Swedish University.

U.S.A.: Bachelor of Arts or Bachelor of Science. Some transfer credit may be permitted. High school diploma is not sufficient.

The first degree is called by various names, such as *Licence, Lizentiat, Diplom,* or *Diplôme,* and generally requires 4 years of fulltime study. In some French-speaking universities certain *Licence* programs require only 3 years of study. In some fields, a *Licence* holder may continue for one more year to complete a *Diplôme* program. Information on length of degree programs is given under the individual university descriptions which follow.

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In many programs, students must take an examination on basic material in the field at the end of the first year of study, known in German-speaking cantons as the *Vordiplomprüfung* I and in French-speaking cantons as the *Propédeutique* I or the *Examen Préliminaire* I. At the end of the second year, a second general exam must be taken (*Vordiplomprüfung* II or *Zwischenprüfung*/*Propédeutique* II or *Examen Préliminaire* II).[1] In other programs the exam is given in one part at the end of the third or fourth semester. The second exam marks the completion of the first cycle of studies, referred to in French-speaking cantons as *1ère cycle* or completion of *demi-licence*. Variation in this exam schedule are noted under the individual university descriptions below.

The next general examination is usually the final, known as the *Schlussdiplomprüfung*/*Examen final de diplôme*. It may include both oral and written work, often graded separately, as well as a thesis presentation. Most 4-year degrees require a thesis. The 3-year *Licence* usually does not.

Graduate Study

Graduate study leading to the doctorate is available at all the universities. The doctorate is usually the only further degree conferred by most universities. Admission to graduate study is based on acceptable university grades. All who have the requisite grade average may enter graduate study if they wish. There is no application or central selection process. A student enters graduate study by finding a professor who will accept the applicant for research work on a project. The student works for several years, taking such coursework as is desired (none is compulsory), and then prepares a dissertation.

In addition to graduate study that leads to the doctorate, most universities offer shorter, usually part-time, graduate courses in specific areas. The subject matter may vary from year to year. These courses are intended for individuals with a first degree in a related field who wish to keep abreast of new developments in the field or pursue a particular area of study with intensity. A certificate is granted on completion. Students working for a doctorate may also enroll in these shorter courses. In the French part of Switzerland such work is often referred to as *troisième cycle* (third cycle) and in the German-speaking areas as *nachdiplom* or *post-graduierten Studium* (post-graduate studies).

Transcripts and Grading Scales

A transcript, often referred to as an *Attestation*, showing specific courses is sometimes available. Some applicants may be able to present only student records, known by different designations in different universities (see individual listings), which show all courses taken and the professor's name, but no grades. These are official records and must be presented by the student to the university officials in order to be admitted to examinations. Often only the examination results of the *Vordiplomprüfung* I and II/*Propédeutique* I and II and the *Schlussprüfung*/*Examen final du diplôme* are available.

1. A Swiss student receives a certificate for each part of the exam. The division of this exam in some programs into two parts, given one year apart, is in contrast to the German system in which the entire exam is taken at the end of the second year.

Some universities use a system of a weighting coefficient for each course, and the final grade is the result of multiplication of the coefficient by the grade. This system is indicated on the transcript. Details of each institution's reporting practices are given under the individual university descriptions below.

Individual University Descriptions

NOTE: Where translations of degrees are obvious, the translations have been omitted.

ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE (EPFL/Federal Institute of Technology, Lausanne). Also legally known as Eidgenössische Technische Hochschule Lausanne, and Politecnico Federale di Losane. Frequently referred to as EPFL. **Address:** 33 avenue de Cour, 1007 Lausanne. (The Institute is gradually being relocated at a new campus in Ecublens in the suburbs of Lausanne.) **Established:** 1853, as private technical school; 1890, became part of Université de Lausanne; 1969, became by national statute a federal institute of technology and was officially decreed to have equal standing with the Eidgenössische Technische Hochschule Zürich. **Jurisdiction:** Administered under a Board which oversees both federal institutes of technology. **Enrollment (1978-79):** 1,963 (45% foreign). Of the total number, 213 were in the special preparatory math course (see below), and 223 were doctoral candidates. **Faculty (1976-77):** 92 fulltime, 118 part-time. **Library:** 200,000 volumes. **Language of Instruction:** French; exams may be written in any of the 3 principal languages of Switzerland. **Academic Year:** October-July.

Admissions Requirements: Federal Maturity Certificate, or recognized equivalent. Candidates who do not meet the admissions requirements must take special entrance exam or enroll in a 1-year preparatory course, *Cours de Mathématiques Spéciales* (described below).

Grading & Transcripts: The grading scale, with U.S. equivalent, is as follows: 10-9 = A; 8-7 = B; 6 = C; 5-4 = D; 3-1 = F. Grades are averaged, and 6 is required to pass.

Transcripts known as *Contrôle des Etudes* (Control of Studies) are available for each semester of work (issuance of course transcripts was discontinued in 1980). The second semester transcript shows both the semester average and the year's average and indicates if the student passed the entire year. Transcripts for each *Propédeutique* exam are available, with grades in each subject. A very detailed transcript of the *Examen de Diplôme* is available and will indicate the date when the degree was granted. Transcripts issued prior to 1969 are headed "Ecole Polytechnique de l'Université de Lausanne." The grading scale is the same.

Required Exams for First Degrees: *Propédeutique* I, at the end of the 1st yr of study; *Propédeutique* II, end of 2nd yr; and *Examen final* or *Examen de Diplôme*, end of 4th yr. The final exam covers both theoretical and practical knowledge. Thesis must be submitted.

Degrees: Eight-Semester—*Architecte (arch.dipl.*EPF); *Ingénieur (ing. dipl.*EPF), with specialization, e.g., *Ingénieur chimiste* (Chemical Engineer); *Mathématicien* (math. dipl.EPF).[2]

Graduate Work: A certificate is given on completion of a third cycle part-time course on a selected topic of interest. For instance, in 1979 a course on energy was offered, with lectures one day a week (275 hrs total), between March 1 and Dec. 20.

Doctoral Level: *Docteur ès sciences (Dr ès sc); Docteur ès sciences techniques (Dr ès sc techn).* The distinction between these two degrees is based on research emphasis, not field of study. Both degrees require additional study beyond the first degree, and research culminating in a dissertation.

2. The EPFL graduate is authorized by federal regulation to use the earned degree after his/her name. This frequently appears in the form given.

Special Programs: *Cours de Mathematiques Spéciales* (Course in Special Mathematics). One-year preparatory course required for foreign and Swiss students who do not meet the admissions requirement and do not pass the entrance exam. Enrollment (1978): 213. Course covers intensive work in the following subjects (hrs per wk in parentheses): algebra (analytic) (4); analytic geometry (4); chemistry (2); descriptive geometry (4); geometry & linear algebra (4); mathematics-exercises (4); mechanical drawing (4); physics (5); trigonometry (2). Program requires 33 hrs per wk for 2 semesters; first semester totals 561 hrs, second, 330 hrs. Credit toward undergraduate degree not granted for this preparatory work nor is the coursework offered in the regular first-degree program at the Institute.

EIDGENÖSSISCHE TECHNISCHE HOCHSCHULE ZÜRICH (ETHZ/Federal Institute of Technology Zurich). Also legally known as Ecole Polytechnique Fédérale de Zurich, and Politecnico federale di Zurigo. **Address:** Rämistrasse 101, ETH-Zentrum, 8092 Zürich. **Established:** 1854, by federal law, as the "Federal Polytechnic." **Jurisdiction:** Federal, under the Board which also overseas the Ecole Polytechnique Fédérale de Lausanne. **Enrollment (1978):** 7,363 (12% foreign); approximately 17% doctoral candidates; 66 students in military science non-degree section. **Faculty (1976-77):** 268 fulltime, 358 part-time. **Library:** 1,500,000 volumes. **Language of Instruction:** German. Some courses given in French and English. Exams may be written in any of the three principal official languages of Switzerland. **Academic Year:** October-July.

Admissions Requirements: Federal Maturity Certificate or equivalent recognized by the Institute. Applicants without the Federal Maturity Certificate may qualify by passing an entrance exam *(Aufnahmeprüfung)*.

Grading & Transcripts: The grading scale, with suggested U.S. equivalent, is as follows: 6 = A; 5 = B; 4 = C; 3 = D; 2-1 = F.

Students will have official transcripts of the *Aufnahmeprüfung* if taken, the *Vordiplomprüfung* I and II, and the *Schlussdiplomprüfung*. Transcripts will show subjects taken and grades obtained. Transcripts may give both the weighted grade *(Gewichtete Note)*, the unweighted grade *(Notengewicht)*, and the weighting coefficient.

Required Exams for Degrees: The following exams are taken at the end of the 1st, 2nd, and 4th years, respectively: *Vordiplomprüfung* I, *Vordiplomprüfung* II, and the *Schlussdiplomprüfung*.

Degrees:

Four-Semester Degrees—*Eidgenössisches Turn- und Sportlehrerdiplom* I (Federal Gymnastics & Physical Education Teacher's Diploma, Level I).

Six-Semester Degrees—*Eidgenössisches Turn- und Sportlehrerdiplom* II (Federal Gymnastics & Physical Education Teacher's Diploma, Level II).

Eight-Semester Degrees—*Architekt (Dipl. Arch.* ETH); *Chemiker (Dipl. Chem.* ETH); *Ingenieur (Dipl. Ing. ETH*/name of field may precede or follow word *Ingenieur*, e.g., *Forstingenieur*—Forestry Engineer—or *Ingenieur Agronom*—Agronomist); *Mathematiker (Dipl. Math.* ETH); *Physiker (Dipl. Phys.* ETH); *Naturwissenschafter (Dipl. Natw.* ETH) (Scientist); *Höheres Lehramt* (teaching certificate for academic upper secondary grades/does not indicate further coursework but rather the passing of a special pedagogical exam, which may be taken before or after the first degree in the academic field).

Eleven-Semester Degrees—*Apotheker* (Pharmacist/federal diploma awarded to Swiss citizens only); *Diplom eines Apothekers* (Diploma as Pharmacist/awarded to foreign citizens who complete the pharmacy course).

Graduate Level—A number of part-time graduate programs lead to a *Zeugnis* (certificate), e.g., a 2-yr interdisciplinary course on land development offered by the Institut für Orts-, Regional- und Landesplanung (Institute for Town, Region, & Land Planning).

Doctoral Level: All degrees require several years of research beyond the first degree, and submission of a research dissertation. *Doktor der Mathematik (Dr.sc.math.); Dok-*

tor der Naturwissenschaften (Dr.sc.nat./Doctor of Science); *Doktor der Technischen Wissenschaften (Dr.sc.techn.*/Doctor of Technical Science).

Special Programs: Military Science the only academic military program in Switzerland, is a non-degree program open only to officers of the Swiss military. (There are no service academies.) Courses are from 2 wks to 1 yr in length, depending upon level. Normal university requirements do not prevail. Entrance to each level is based on military rank only. No academic degrees conferred.

HOCHSCHULE ST. GALLEN FÜR WIRTSCHAFTS- UND SOZIALWISSENSCHAFTEN (Higher School of St. Gallen for Economics and Social Science/also translated as St. Gall Graduate School for Economics and Social Science). Formerly known as the Handels-Hochschule St. Gallen. **Address:** Dufourstrasse 50, 9000 St. Gallen. **Established:** 1898, by the business community of eastern Switzerland in response to a need for highly trained experts in economics and business administration. Oldest school of this type in Europe. **Jurisdiction:** Autonomous. Receives financial support from the city and canton of St. Gallen. **Enrollment (1978-79):** 1,772 (27% foreign); 255 doctoral students. **Faculty (1976-77):** 48 fulltime, 107 part-time. **Library:** 74,000 volumes. **Language of Instruction:** German. Many courses offered in English and French. **Academic Year:** October-July.

Admissions Requirements: Federal or Cantonal Maturity Certificate or equivalent foreign credential. Applicants without a Federal Maturity Certificate but with another kind of academic secondary school leaving certificate must take an entrance exam, *Zulassungsprüfung*. The exam, written in 4 hours on specified topics, may be completed in English, French, German, Italian, Portuguese, or Spanish.

Applicants without any maturity certificate may qualify for admission by taking a very comprehensive entrance exam, *Aufnahmeprüfung*. This exam is also required of applicants with only a Cantonal Commercial Maturity Certificate.

Grading & Transcripts: The grading scale with suggested U.S. equivalent is as follows: 1 = A; 1.5 = B+/A−; 2 = B; 2.5 = C+/B−; 3 = C; 4 = Failure.

Transcripts of the final exam will show the areas covered by the exam, separate marks for written and oral sections, title of thesis and, sometimes, rank in class. The Hochschule provides a certified list of all courses taken, and indicates in English the school's interpretation of the U.S. equivalent of each level of studies—e.g., *prevordiplomprüfung* is indicated as "Int. Ex." (Intermediate Examination), equivalent of undergraduate studies; pre-first degree as A.M. (master's level); and post-first degree as Ph.D. level. The student will also have a *Belegbuch* (enrollment book) listing courses studied each semester, number of hours per week of study, and the professor's name, but no grades.

Required Exams for First Degree: *Vordiplomprüfung* (also referred to as *Zwischenprüfung)*, a series of 10 separate subject exams to be taken between 2nd and 4th semesters; *Diplomprüfung* (diploma exam), taken at end of 8th semester (9th semester for the Diploma in Economics Teaching).

Degrees:

Eight-Semester Degrees—*Licentiatus iuris (lic. iur.)* or *Lizentiat der Rechtswissenschaften* (Law); *Licentiatus oeconomiae (lic. oec.)* or *Lizentiat der Wirtschaftswissenschaften* (Economics); *Licentiatus rerum publicarum (lic.rer.publ.)* or *Lizentiat der Staatswissenschaften* (Public Administration).

Nine-Semester Degrees—*Magister oeconomiae (mag.oec.)* or *Handelslehrerdiplom* (Diploma in Economics for teaching at academic upper secondary or university level). This degree is at the same level as the *Licentiatus oeconomiae*. The additional semester is spent in practice teaching.

Doctoral Level—*Doctor iuris (Dr. iur.)* or *Doktor der Rechtswissenschaften* (Law); *Doctor Oeconomiae (Dr. oec.)* or *Doktor der Wirtschaftswissenschaften* (Economics); *Doctor rerum publicarum (Dr. rer. publ.)* or *Doktor der Staatswissenschaften* (Public Administration).

Programs: First degree programs follow a common 2-yr basic program (*Grundstufe*), except for law, which follows the first year of the basic program. The basic program includes introductory courses in accounting, business, decision-making, economics (general, macro-, micro-), finance, information (computer) science, language (choice of one foreign language), law (business, governmental, personal), mathematics, personnel, and psychology. After passing the *Vordiplomprüfung*, the student follows the chosen specialization courses.

Special Programs: Regular program of short courses (*Weiterbildungsstufe*), 2-5 days in length, for alumni of the university; no academic credit.

UNIVERSITÄT BASEL (University of Basel), Kollegienhaus, Petersplatz 1, 4051 Basel. **Established:** 1460. **Jurisdiction:** Canton Basel-Stadt. **Enrollment (1978-79):** 5,577 (10% foreign). **Faculty (1976-77):** 157 fulltime, 325 part-time. **Library:** 2,000,000 volumes. **Language of Instruction:** German. **Academic Year:** Late October-early July.

Admissions Requirements: One of the following: Federal Maturity Certificate; Cantonal Maturity Certificate; *Musische Maturität Basel-Landschaft* (Cantonal Music Maturity Certificate of Basel-Landschaft), acceptable only for Faculty of Philosophy-History; *Handelsmaturität* (Cantonal Commercial Maturity) plus special entrance exam; *Primarlehrerpatent* (cantonal Primary Teacher's Certificate) plus special entrance exam.

Grading & Transcripts: Grading scale, with suggested U.S. equivalents, is as follows: 6 = A (*mit Auzeichnung* or *Summa cum laude*); 6-5 = A– (*sehr gut* or *Insigni cum laude*); 5 = B (*gut* or *Magna cum laude*); 5-4 = B– (*befriedigend* or *cum laude*); 4 = C (*genügend* or *Rite*); 3, 2, 1 = F (*ungenügend*).

A transcript will be available for each of the exams. The student will also have a record of all courses in a *Testatbuch* (testament book), which lists each subject and number of hours per week each course met, but no grades. Grades may be awarded in words (German or Latin, depending on the faculty) or numbers.

Required Exams: Required exams for dentistry, medicine and pharmacy are described in Chapter V. For all other first degrees there are *Vordiplomprüfung* exams at the end of the 4th semester, and a final degree exam, known as the *Abschlussexamen*, the *Diplomprüfung*, or the *Lizentiaten-Examen*. At this university the *Vordiplomprüfung* is not taken in two sections a year apart.

Degrees:

Four-Semester Degrees—*Diplom in Heilpädagogik* (Diploma in Handicapped Education); *Eidgenössisches Turn- und Sportlehrerdiplom I für die Mittel- und Unterstufe* (Federal Gymnastics & Physical Education Teacher Diploma I for teaching the middle and lower grades/program to be increased to 6 semesters).

Six Semesters—*Akademisch-technischer Assistent* (Academic Technical Assistant/Program under joint sponsorship of Faculties of Medicine and Philosophy-Natural Sciences/2 semesters of science required, followed by general exam in botany, chemistry, physics, and zoology, followed by 2 yrs of practical and theoretical work in an institute of the Faculty of Medicine or of Philosophy-Natural Science); *Eidgenössisches Turn- und Sportlehrerdiplom II für die Mittel- und Oberstufe* (Federal Gymnastics & Physical Education Teacher Diploma II for teaching in the middle and upper grades); *Logopädisches Diplom* (Speech Therapy Diploma/in addition to course-work, 1,000 hrs' practice teaching required); *Mittellehrerdiplom* (Middle School Teacher Diploma/1 yr of practice teaching required, in addition to 6 semesters of academic work).

Eight Semesters—*Diplom* (first degree in Philosophy-Natural Science Faculty); *Handelslehrerdiplom* (Commercial Teacher's Diploma/8 semesters plus 6 months' internship); *Licentiatus philosophisch (lic. phil.)* (Philosophy-History); *Licentiatus iuris (lic. iur.)* (Law); *Licentiatus rerum politicarum (lic. rer. pol.)* (Economics & Social Sciences, or Sociology); *Lizentiat der Theologie*; *Pfarrer* (Minister/1-yr vicarate also required).

Nine Semesters—*Diplom in medizinischer Biologie* (Diploma in Medical Biology; 6-month internship in university institute required); *Oberlehrerdiplom* (Secondary School Teacher's Diploma/may be obtained after *Mittellehrerdiplom* or *Licence* or directly without any other degree).

Ten Semesters—*Zahnarzt* (Dentist).

Eleven Semesters—*Apotheker* (Pharmacist).[3]

Twelve Semesters—*Arzt* (Physician).

Special Diploma Program—*Diplom in Orthodidaktik des Lesens* (Diploma in Special Methods of Teaching Reading). Conferred on completion of 50-hr course and internship. Open to experienced certified teachers.

Doctoral Level—*Doktor der Medizin* or *Doctor Medicinae* (Advanced research degree beyond the *Arzt*); *Doktor der Medizinischen Biologie* or *Doctor biologiae medicinalis* (Medical Biology); *Doktor der Theologie* or *Doctor theologiae* (Evangelical Reformed Theology); *Doctor iuris* (Law); *Doctor medicinus dentalis* (Dental Medicine/advanced research degree beyond the *Zahnarzt*); *Doctor philosophiae* (Philosophy); *Doctor rerum politicarum* (Economics and Social Sciences, or Sociology).

Institutes: (1) Institut für Leiberserziehung und Sport (Institute for Physical Training & Sport). First and second level federal physical education teacher's diplomas awarded. (2) Institut für Spezielle Pädagogik und Psychologie (Institute for Special Education & Psychology). Münzgasse 16, 4051 Basel. Training for teachers of special education offered. Programs include handicapped education, reading disabilities, and speech therapy. (See Chapter III for complete description of both institutes).

Universität Bern (University of Bern), Hochschulstrasse 4, 3012 Bern. **Established:** 1834. **Jurisdiction:** Canton Bern. **Enrollment (1979-80):** 7,310 (6% foreign). **Faculty (1979-80):** 256 fulltime, 302 part-time. **Language of Instruction:** German. **Academic Year:** Late October-early July.

Admissions Requirements: One of the following: Federal Maturity Certificate, Cantonal Maturity Certificate, Primary School Teacher Certificate, Secondary School Teacher Certificate with entrance exam, Commercial Maturity Certificate with entrance exam. Admission to the *Musiklehrer* (music teacher) program requires only a Certificate of Proficiency from a music conservatory and an entrance exam.

Grading & Transcripts: Grading scale varies with faculty as shown below.

Theological Faculties	Faculty of Law & Social Science: Law	Faculty of Law & Social Science: Science	All Other Faculties	Doctoral Programs	Suggested U.S. Equivalent
1	5	10	6	*Summa cum laude*	A
–	–	9	–	–	A–
2	4	8	5	*Magna cum laude*	B
–	–	7	–	–	B–
3	3	6	4	*Cum laude*	C
–	–	5	–	–	–
–	–	4	–	–	–
4	2	3	3	*Rite*	F
5	1	2	2	–	F
–	–	1	1	–	F

3. Pharmacy program discontinued at the end of *Wintersemester* 1978-79.

An official transcript is not regularly available. Only the final diploma will show the cumulative grades. Transcripts of the *Zwischenprüfung* (intermediate examinations) are rarely available. Each student, except those enrolled in *Rechts- und Wirtschaftswissenschaftliche Fakultät* (Law & Economics Faculty), will have a *Testatbuch* (witness book) in which a professor's signature for every course attended will be given. No grades are entered.

Required Examinations: *Vordiplomprüfung I*, end of 2nd semester. *Vordiplomprüfung II*, end of 4th in 8-semester program; end of 6th in 10-semester program. *Hauptprüfung* (main exam), end of 8-10 semesters.

Degrees:

Four-Semester Degrees—*Eidgenössisches Turn- und Sportlehrerdiplom I* (Federal Gymnastics & Physical Education Teacher Diploma, Level I).

Five Semesters—*Berner Notariatspatent* (Canton of Bern Notary Certificate).

Six Semesters—*Eidgenössisches Turn- und Sportlehrerdiplom II* (Federal Gymnastics & Physical Education Teacher Diploma, Level II).

Seven Semesters—*Fachlehrerpatent* (teaching certificate in various disciplines of secondary, vocational, and commercial schools).

Eight-Semester Degrees—*Berner Handelslehrerpatent* (Canton of Bern Commercial Teacher Certificate); *Berner Sekundarlehrerpatent* (Canton of Bern Secondary School Teacher Certificate); *Diplom für Lehrer und Sachverständige der Erziehungs- und Bildungswissenschaften* (Diploma for Teacher & Expert in Teaching & Educational Pedagogy); *Lizentiat der philosophisch-historischen Fakultät (lic.phil. hist.)* (Licentiate in Philosophy-History); *Lizentiat der philosophisch-naturwissenschaftlichen Fakultät (lic.phil.nat.)* (Licentiate in Philosophy-Natural Science); *Licentiatus iuris (lic. iur.)* (Law); *Licentiatus rerum politicarum (lic. rer. pol.)* (Economics & Social Science, or Sociology); *Patent für das höhere Lehramt* (Certificate for Upper Secondary School Teacher); *Pfarrer* (Minister), conferred by Christ Catholic (Reformed) Theology Faculty.

Nine Semesters—*Pfarrer* (Minister), conferred by Evangelical Theology (Protestant) Faculty.

Ten Semesters—*Tierarzt* (Veterinarian); *Zahnarzt* (Dentist).

Eleven Semesters—*Apotheker* (Pharmacist).

Twelve Semesters—*Arzt* (Physician).

Doctoral Degrees—The doctorate is offered in the following fields: Dentistry (advanced research degree beyond the *Zahnarzt*), Economics and Social Science, Law, Medicine (advanced degree beyond the *Arzt*), Pharmacy (advanced research degree beyond the *Apotheker*), Philosophy, Theology, and Veterinary Medicine (advanced degree beyond the *Tierarzt*).

Institutes and Special Programs:

Secondary School Teacher Training Program (does not have the status of a separate faculty)—(1) Offers courses (in both French and German) in teaching all subjects taught in academic lower secondary school. (2) Offers training for academic upper secondary school teaching in German only. The French program leads to the *Brevet d'enseignement secondaire*, the German to the *Sekundarlehrerpatent*.

Institut für Leibeserziehung und Sport (Institute for Physical Education & Sport). Preparation for the two federally regulated diplomas in physical education teaching. (For details see Chapter III.)

UNIVERSITÄT FREIBURG/UNIVERSITÉ DE FRIBOURG (University of Fribourg). Also known in Latin as Universitas Friburgensis Helvetiorum. **Address:** Miséricord, 1700 Fribourg. **Established:** 1889. Recognized center of higher education of the Roman Catholic Church of Switzerland. **Jurisdiction:** Canton Fribourg, with substantial financial support from the Roman Catholic Church of Switzerland. **Enrollment (1978-79):** 3,899 (22% foreign). **Faculty (1976-77):** 195 fulltime, 107 part-time. **Library:** 1,000,000 volumes. **Language of Instruction:** German and French. Only officially bilingual university in Switzerland. **Academic Year:** mid-October to early July.

Admissions Requirements: Varies according to faculty. The Federal Maturity Certificate and the Cantonal Maturity Certificate with special exam are acceptable for admission to all faculties. The Cantonal Commercial Maturity Certificate with special exam is acceptable for the Faculties of Economics & Social Science, Philosophy, and Theology. The Primary School Teacher Certificate is acceptable for the Faculty of Theology or for work toward the Secondary School Teacher Diploma.

Grading & Transcripts: Grading scale, with suggested U.S. equivalent, is the following: 3.6-5 = A *(summa cum laude)*; 3.0-3.5 = B *(magna cum laude)*; 2.0-2.9 = C *(cum laude)*; below 2.0 = D *(ungenügend)*. Grade for first degree determined by averaging results of all exams. Transcript of each series of required exams (issued in French) available; gives grades for both oral and written parts of exam and for thesis. The student record book, *Tabella Scholarum*, gives courses and professors' names, but no grades.

Required Examinations: Vordiplom III^er^ *examen préliminaire* (pre-diploma or first preliminary exam) at end of 1st year; *Vordiplom* II^er^ *examen préliminaire* at end of 2nd yr. In some fields an exam known as *Zwischenprüfung/Examens intermédiaires* is given only at the end of the 4th semester. The *Schlussexamen/Examen final* (final exam) is given at end of final (7th or 8th) semester.

Degrees: Note: The German and French names are used within the University, but the diplomas are issued in Latin. In addition to degrees listed below, several attached institutes confer special certificates. See description of each institute below.

Four-Semester Degrees—Diplom für Hilfs- und Sonderschullehrer/Diplôme de capacité pour l'enseignement spécialisé (Diploma for Handicapped or Special Education/1 yr of practical experience also required); *Diplom in allgemeiner Pädagogik/Diplôme en pédagogie générale* (Diploma in Pedagogy); *Heilpädagogischesdiplom/Diplôme en pédagogie curative* (Handicapped Education Diploma/1 yr of practical experience also required/students with teaching experience but no maturity certificate may be admitted to program); *Logopädisches Diplom* (Speech Therapy Diploma), offered only in German.

Five Semesters—Sekundarlehrerdiplom or *Sekundarlehrerpatent/Diplôme d'enseignement secondaire* (Lower Secondary School Teacher's Diploma).

Seven Semesters—Lizentiat der Rechtswissenschaften/Licence en droit (Licentiate in Law).

Eight Semesters—Diplom/Diplôme (first degree in Sciences); *Diplom für Sozialarbeit/Diplôme de service sociale* (Social Work); *Gymnasiallehrerdiplom/Diplôme de maître de gymnase* (Academic Upper Secondary School Teacher Diploma); *Handelslehrerdiplom/Diplôme de maître de gymnase socio-économique* (Diploma for Teacher of Commercial & Socio-Economic subjects); *Lizentiat/Licence ès lettres* (first degree in Humanities and Social Sciences); *Lizentiat in Naturwissenschaft* or *Licence en biologie* (Biology), granted to those preparing to teach biology, rather than continue in research.

Ten Semesters—Abschlusszeugnis in Theologie (Leaving Certificate in Theology/indicates student has followed basic courses in theology and is eligible for Roman Catholic priesthood, but has not written required thesis for *Lizentiat* or *Diplom*); *Diplom in Theologie/Diplôme en théologie* (for those training for pastoral work who do not wish to complete all the special academic requirements for the Licentiate in the field); *Lizentiat in Pastoral Theologie/Licence en Théologie pastorale* (Roman Catholic Theology).

Graduate Level—Diplom für Automation und Unternehmensforschung or *Diplom für Automation und Operations Research* (Automation & Operations Research/4 semesters beyond first degree); *Diplom für Betriebsinformatik* or *Diplôme d'automation* (Computer Science/4 semesters beyond first degree in Economics & Social Science or similar field with solid background in national economics & statistics/applicants with 4 yrs of practical experience in field may be admitted without first degree/courses taught in English, French, German); *Diplom für Sozialwissenschaft und Politik* (Social Science & Political/4 semesters beyond first degree).

Doctoral Degrees—Doktorat/Doctorat ès lettres. Offered in Economics, Law, Philosophy, Sciences, and Theology. All programs require additional study and dissertation based on research.

Institutes:

1. Englisches Sprachinstitut/Institut pratique d'Anglais (English Language Institute). Courses open to both matriculated University students and non-students. Two certificates conferred, each after 1 semester's work; both indicate only levels of English proficiency, *Englisches Sprachdiplom für Anfänger/Certificat d'études anglaises élémentaires* (Elementary English Studies) and *Englisches Sprachdiplom/ Certificat d'études anglaises* (English Studies). The latter is more advanced.
2. Französisches Sprachinstitut/Institut pratique de français (French Language Institute). Courses open to both matriculated University students and non-students. The Institute awards a *Certificat* (1 semester of 14 hrs a wk) which indicates elementary knowledge of French, and a *Certificat d'études françaises* (French studies), (1 additional semester of 14 hrs a wk). A program for those who wish to teach French Language & Literature is also offered and leads to the *Diplôme d'aptitude à l'enseignement du français à l'étranger* (Aptitude for Teaching French to Foreigners). The Program includes French Literature, Civilization, and History, but no pedagogical instruction.

   These three credentials all indicate different levels of knowledge of French and are not university first degrees. Normal university admissions requirements do not pertain.
3. Heilpädagogisches Institut/Institut de pédagogie curative (Special Education Institute). Offers courses in Special Education to students already matriculated in the Philosophy Faculty. *Attestation* of coursework given to those who attend classes but do not take final exams.
4. Institut für Automation und Unternehmensforschung/Institut pour l'automation et la recherche opérationnelle (Institute for Automation and Operations Research). Offers 4-semester graduate program in either administrative work or computer science leading to *Diplom für Automation und Operations Research*. Degree awarded through Faculty of Law.
5. Institut für Deutsche Sprache/Institut de langue allemande (German Language Institute). Courses open to matriculated University students and non-students interested in language study. Special training courses offered for candidates for the Secondary School Teacher's Diploma whose native language is not German. A *Zeugnis/Certificat* given for successful completion of each 1-semester course. A *Kleines Sprachdiplom des Instituts für deutsche Sprache* ("Little" Speech Diploma of the German Language Institute) given on completion of longer language program.
6. Institut für Journalistik und Kommunkationswissenschaft/Institut de Journalisme et des communications sociales (Institute for Journalism & Communication). Four-semester graduate program leads to *Diplom in Journalistik/Diplôme en Journalisme* for students who entered with first degree. Certificate given to those who follow the same program but who do not hold a first degree.
7. Institut für Leibeserziehung und Sport/Institut d'éducation physique et de sport (Institute for Physical Education & Sports). Offers physical education elective courses, but not the federal diploma courses for a physical education teacher's certificate. Students preparing for secondary school teaching credential can fulfill physical education requirements by teaching one subject in this institute.
8. Institut für Ökumenische Studien/Institut d'études oecuméniques (Institute for Ecumenical Studies). Sponsors general interest seminars and courses in ecumenical studies. Open to all interested persons.
9. Institut für Pädagogik/Institut de Pédagogie (Institute for Pedagogy). Provides psycho-pedagogical, didactic, and methodological training for all candidates for a lower or upper Secondary School Teacher's Diploma or a Commercial Teacher's Diploma.
10. Internationales Institut für Sozialwissenschaft und Politik/Institut international des sciences sociales et politiques (International Institute for Political & Social Science). Four-semester postdoctoral program leads to a *Diplom/diplôme*.

11. Österreich-Institut/Institut de l'Europe orientale (Eastern European Institute). Courses open both to matriculated University students and non-students. No degree granted. Two certificates issued: *Zeugnisse über einzelne Disziplinen/Certificat de cours* (Certificate of completion of 1-semester course); *Fundamentalsowjetologisches Zeugnis/Certificat d'études soviétologiques fondamentales* (Basic Soviet Studies). The latter certificate indicates completion of a 2-semester, fulltime program.
12. Psychologisches Institut/Institut de psychologie (Psychological Institute). Matriculated students in Philosophy Faculty preparing for *Licence en Psychologie* may take courses. Students studying for doctorate in the field also accepted.

Special Programs:

1. American College Program. Designed to coordinate U.S. academic study abroad programs at the University.
2. Language Courses *(Praktische Sprachkurse/Cours Pratiques de Langues)*. A series of language courses, not part of regular degree programs, offered. French, Greek (ancient and modern), Italian, Latin, Russian, and Spanish for beginning and advanced students. Also open to general public.
3. Foreign Student Preparation. The Université de Fribourg has been designated by the universities of Switzerland as the general preparatory center for foreign students wishing to enter Swiss universities. A 2-semester preparatory course culminates in an oral and written entrance exam *(Aufnahmeprüfung/Examen d'entré)*. The exam is offered twice a year and may be taken in either French or German, with or without the preparatory course. Subjects tested: Instructional language (either French or German), composition, history, mathematics, and two other subjects, one from a field of science (biology, chemistry, geography, or physics). University credit not given for this preparatory work.
4. *Troisième Cycle* Programs. A number of graduate-level programs offered annually lead to a certificate but not directly to the doctoral degree.

UNIVERSITÉ DE GENÈVE (University of Geneva), Place de l'Université, 1211 Genève 4. **Established:** 1559, by John Calvin, as the Schola Genevensis; became the Université de Genève in 1873. **Jurisdiction:** Canton Genève. **Enrollment (1978-79):** 8,268 (34% foreign). **Faculty:** 532 fulltime, 629 part-time. **Library:** 1,200,000 volumes. **Language of Instruction:** French. **Academic Year:** Late October–mid-July.

Admissions Requirements: One of the following is normally required: Federal Maturity Certificate, Cantonal Maturity Certificate from l'Ecole supérieure de commerce de Genève, Diploma from l'Ecole supérieure de commerce de Genève, or Artistic Maturity Certificate of Canton Genève.

There is a special admissions program for students without any of the above credentials; it is applicable only to persons 25 or older who are Swiss nationals or who have lived in Switzerland specified lengths of time varying with areas of the country, and who have had at least 3 yrs of professional experience related to proposed field of study. Additional entrance tests usually required.

Grading & Transcripts: The grading scale, with suggested U.S. equivalent, is as follows: 6 = A; 5 = B; 4 = C; 3 = D; 2 & 1 = F. An average of 4 is required to pass, with no grades of 2 or below, and no more than one grade of 3. Affiliated institutes with degree programs follow the same grading scale.

The student course record book is known as the *Livret d'étudiant*. The University also issues an *Attestation* for each semester's work, showing the courses, professor's name, whether the exam was written *(écrit)* or oral *(oral)*, and the grade. It also gives the grade average in the first 2 yrs *(première demi-série)*, in the second 2 years *(deuxième demi-série)*, and the overall grade average.

Degrees and Certificates:

One-Semester Certificates—*Certificat d'études françaises* (French Studies); *Certificat d'études pratiques de français* (Practical French Studies).

Two-Semester Diplomas—*Diplôme d'aptitude à l'enseignement du français* (Aptitude for Teaching French as a Foreign Language); *Diplôme d'études françaises modernes* (Modern French Studies); *Diplôme d'études françaises modernes: mention enseignement du français, langue étrangère* (Modern French Studies; Specialising in Teaching French as a Foreign Language).

Four-Semester Degrees—*Certificat en théologie* (Theology/awarded by the Faculty of Theology to students enrolled in other faculties who take at least 6 hrs a week of theology for 2 yrs); *Diplôme fédéral I de maître de gymnastique* (Federal Diploma I as a Teacher of Physical Education/First-level diploma/second-level diploma not offered.

Six-Semester Degrees—*Licence en droit* (Law); *Licence en géographie* (Geography); *Licence en science de l'éducation* (Science of Education); *Licence en sociologie* (Sociology); *Licence ès sciences* (with field, generally Biological Sciences); *Licence ès sciences commerciales et industrielles* (Commercial and Industrial Sciences); *Licence ès sciences économiques* (Economic Sciences); *Licence ès sciences politiques* (Political Sciences).

Eight Semesters—*Diplôme* (with field/often awarded after 2 semesters of study beyond the *Licence* in the same field, generally in science);[4] *Diplôme d'études supérieures en droit* (DES/higher studies in Law/may include the 6-semesters' work for the *Licence en droit* but can be obtained without the *Licence*); *Diplôme de traducteur* (Translator); *Diplôme en économétrie* (Econometry/usually awarded after *Licence*); *Diplôme en science politique* (usually awarded after *Licence*); *Diplôme en psychologie; Licence en histoire; Licence en pédagogie; Licence en psychologie; Licence en théologie; Licence ès sciences* (Sciences & Mathematics); *Licence ès sciences politiques, mention études internationales.*

Ten Semesters—*Diplôme d'architecte; Diplôme de biologie médicale; Diplôme en théologie* (2 semesters beyond the 8-semester *Licence en théologie* required for admission to this program); *Diplôme fédéral de médecin-dentiste* (Federal Diploma in Dental Medicine/conferred on Swiss citizens only); *Licence en médecine dentaire* (conferred on foreign citizens who complete the dental program/does not permit dental practice in Switzerland).

Eleven Semesters—*Diplôme de pharmacien* (Pharmacist).

Twelve Semesters—*Certificat de fin d'études médicales* (Certificate of Completion of Medical Studies/conferred on foreign citizens who complete the medical program, but does not permit practice in Switzerland); *Diplôme fédéral de médecin* (Federal Diploma of Physician/open to Swiss citizens only).

Graduate Study: *Certificat de spécialisation* (2-4 semesters of part-time graduate work in particular area/first degree in related field required for admission); *Diplôme d'études avancées en éducation* (Advanced Studies in Education/minimum of 2 semesters further study in education for those with first degrees and at least 3 yrs' pedagogical experience); *Diplôme d'interprète* (Interpreter/see Translator and Interpreter Programs, Chapter IV); *Diplôme en pédagogie avec spécialisation* (Pedagogy with specialization/4 semesters beyond first degree in education).

Institutes and Special Programs:

1. Centre d'Etudes Industrielles (CEI/Center for Education in International Management). See Business Administration, later in this chapter, for address and details of program.
2. Institut Oecuménique/Ökumenisches Institut (Ecumenical Institute), Chateau de Bossey, 1298 Céligny. Two programs offered: short courses in theology (open to students, pastors, and lay persons of different religious groups from all over the world), and annual certificate program (October-February), under auspices of the World Council of Churches and the Université de Genève. Languages of Instruction: English, French, German. Admission to Certificate Program: Same credentials

4. Where both a *Licence* and a *Diplôme* are offered in the same field, the *Licence* indicates general knowledge of the field and in related fields, and the *Diplôme* indicates more specialized study as preparation for research in the field.

as for the University plus background in theological studies. A few students without such credentials may also occasionally be admitted. No degrees awarded, only a certificate.

3. Institut Universitaire de Hautes Etudes Internationales (officially known as The Graduate Institute of International Studies), rue de Lausanne 132, 1211 Genève 21. Est 1927. Enrollment: 300, from 60 nations (50 pre-first degree, 250 graduate level). Faculty: International. Languages of Instruction: French and English. Grading Scale: Same as the University.

   Teaching and research establishment devoted to scientific study of contemporary international relations (primarily at graduate level). Students prepare to teach International Relations, to enter diplomatic careers or international civil service, to work as political or economic journalists, or to join international companies at management level.

   Degrees (conferred jointly with the University):

   Licence ès sciences politiques (études internationales) (Political Science/International Studies). 8 semesters, first 4 at the University, last 4 at the Institute.

   Doctorat ès sciences politiques. 4 yrs beyond first degree. Program includes contemporary history, international economics, international law, international organization, international relations, and research thesis.

   Diplôme de l'Institut. Diploma conferred independently by the Institute for students who complete study and research beyond first degree but lack the time to fulfill all requirements for the doctorate.

   Special Programs:

   Diplomatic Training Program. Organized for trainees of the Swiss Federal Department of Foreign Affairs and, by special agreement, for diplomats from other countries. Open to those with university first degrees. Entrance exam required. Trainees spend one semester of 2-yr training period at the Institute.

   Junior Diplomacy Training Program. In the mid-1970s the Institute signed a 3-yr contract to train a group of Iranian students at the entering undergraduate level. The program consisted of courses in economics, history, politics & law, and language study. Classes met for 2-4 hrs a wk for 2 semesters. Few students proceeded beyond the language study. The contract was terminated early and no longer exists. No degrees were awarded. Students who participated in coursework will have a record of their work, *Procès-Verbal*.

   Exchange Programs. The Institute has regular 1-yr exchange programs involving a limited number of students from the Fletcher School of Law and Diplomacy (Medford, MA) and the School of International Affairs of Columbia University (NY).

   Program for Strategic and International Security Studies (PSIS). Offers training and research opportunities in the area of national and international security, strategy, and arms control. Regular seminars and special courses offered for students, civil servants, military specialists, and others. No degrees awarded.

4. Institut universitaire d'études européennes (University Institute of European Studies), 122, rue de Lausanne, Genève. Est 1963, as autonomous institution of higher level teaching & research in European Studies; 1978, affiliated with the Université de Genève. Admissions: *Licence* or equivalent degree. Offers graduate-level degree programs leading to the following awards: *Certificat d'études européennes* (2 semesters work at the Institute) and the *Diplôme d'études européennes* (4 semesters work).

5. Institut universitaire d'études du développement/Institut für Entwicklungsstudien (University Institute of Development Studies), 24, rue Rothschild, 1202 Genève. Est 1961, as the Centre genevois pour la formation de cadres africains (Geneva Center for Training of African Cadres); 1962, became the Institut Africain de Genève; 1973, became the Institute d'études du développement; 1977, affiliated with the Université de Genève and added *universitaire* to its name.

The aim of the Institute is to promote teaching and research related to problems of development. It particularly welcomes Third World students. Admission normally requires a university first degree. However, programs are also open to regular degree students from the Université de Genève or to those with credentials making them eligible for admission to the University, and to those without standard admissions credentials.

Credentials Awarded:

Certificat de Seminaire. Given to all students for each course taken; shows topic of seminar, particular paper prepared by student, and grade in seminar.

Certificat. Given for completion of 2-semester program, normally 6 credits (each course equals one Swiss credit).

Diplôme d'études de développement (Development Studies). Given for completion of 4-semester program with a total of 10 credits.

Diplôme de recherche en études du développement (Research in Development Studies). 2-4 semester program. First degree required for entrance. Coursework and research thesis required.

NOTE: If the certificate or diploma is awarded by the Université de Genève since 1977 (date of affiliation), it indicates the student held acceptable university admissions credentials; if awarded by the Institute rather than the University since 1977, it indicates the applicant did not have acceptable University admissions credentials.

The Doctorate is not given by the Institute. Its resources are, however, open to anyone doing doctoral studies elsewhere.

UNIVERSITÉ DE LAUSANNE (University of Lausanne), 4, place de la Cathédrale, 1000 Lausanne (gradually being relocated to the Lausanne suburb of Dorigny). **Established:** 1890, as university by expansion of academy for theological study founded in 1537. **Jurisdiction:** Canton Lausanne. **Enrollment (1978-79):** 5,057 (26% foreign). **Faculty (1976-77):** 237 fulltime, 222 part-time. **Language of Instruction:** French. **Academic Year:** Late October-early July.

Admissions Requirements: Federal or Cantonal Maturity Certificate. Cantonal Commercial Maturity Certificate from French-speaking Swiss cantons acceptable for admission only to the Faculty of Social Science and Political Science.

Grading and Transcripts: The grading scale, with the suggested U.S. equivalent, is as follows: 10 = A+; 9 = A−; 8 = B+; 7 = B−; 6 = C+; 5 = C−; 4 = D; 3-1 = F. A general average of 6 is required to pass; no course grades may be below 4; and no more than one grade may be between 4-4.5. Average of 7 required for admission to graduate study toward the doctorate.

An *Attestation* of the 1st and 2nd *propédeutique* examinations is available. The student course record book is called the *livret d'étudiant*.

Required Examinations: *Epreuve de contrôle*, at end of 2nd semester; *Examen de licence* or *Examen propédeutique*, end of 4th semester (first 4 semesters referred to as *première cycle* or *demi-licence); Examen final*, end of 6th or 8th semester, depending on length of program.

Degrees & Certificates:

Two-Semester Degrees—*Attestation* (indicates completion of at least 2 semesters of study in field that is not part of student's *Licence* program); *Certificat d'études françaises* (French Studies).

Four-Semester Degrees—*Diplôme d'aptitude à l'enseignement du français, langue étrangère* (Teaching French as a Foreign Language); *Diplôme fédéral de maitre d'éducation physique I* (Teaching Physical Education, Level I/program being increased to 6 semesters).

Six-Semester Degrees—*Licence en droit* (Law); *Licence en sociologie; Licence ès sciences actuarielles* (Actuarial Sciences); *Licence ès sciences économiques; Licence ès sciences sociales et psychopédagogiques*.

Eight-Semester Degrees—*Diplôme* (with subject/see also *Licence ès Sciences*, granted in science fields but with different emphasis); *Diplôme d'études de police scientifique et de criminologie; Diplôme universitaire de pharmacien* (University Diploma in Pharmacy/awarded to foreign citizens only. They complete a curriculum identical to that completed by Swiss students. Foreign students may complete the program in 8 semesters, rather than the 11 required for Swiss students because the 3-semester required internship must be completed before admission by foreign students.); *Licence d'université* (Licentiate of the University/Type I, awarded to those preparing to teach mathematics and physics; Type II, to those preparing to teach natural sciences); *Licence en théologie* (Theology/Protestant Evangelical-Reformed); *Licence en psychologie; Licence ès lettres* (Licentiate in Letters, i.e., Humanities); *Licence ès sciences* (with science field/indicates preparation to teach science rather than specialization in research); *Licence ès sciences religieuses* (Religious Sciences/awarded to those preparing to teach religion, not preparing for the ministry); *Licence romande en psychologie* (Licentiate of Swiss-romande, i.e., French-speaking Switzerland, in Psychology/degree granted following an intercantonal program of the French-speaking Swiss universities).

Eleven-Semester Degrees—*Diplôme fédéral de pharmacien* (Pharmacist/awarded to Swiss citizens only).

Twelve-Semester Degrees—*Diplôme de médecin conféré par l'Université de Lausanne* (Medicine/conferred on foreign citizens who complete the medical program; does not permit practice in Switzerland); *Diplôme de médecin délivré par la Confédération Suisse* (Medicine/awarded by Swiss Confederation to Swiss citizens only).

Graduate Study: *Certificat d'études supérieures* (Certificate of Higher Studies—with subject/awarded on completion of *troisième cycle* graduate specialization program/length of program varies); *Diplôme d'études de criminologie* (2 semesters); *Diplôme en psychologie* (2 semesters beyond *Licence en psychologie*).

Teaching Credential: *Brevet d'aptitude pédagogique à l'enseignement secondaire* (Pedagogical Aptitude for Secondary Teaching/2 semesters beyond *Licence*).

Doctoral Degrees: The doctorate is given in most fields and requires further study, research, and a dissertation.

Institutes and Special Programs:

1. Cours pour la formation des maîtres d'éducation physique (Course for Training Teachers of Physical Education). Federally regulated training program for physical education teachers offered. (See Chapter III for details.)
2. Ecole de français moderne (School of Modern French). Attached to Faculty of Letters. Offers part-time course (5-11 hrs a wk) and intensive fulltime course (20-25 hrs a wk) in French Language, Literature & Culture. Both programs open only to Université de Lausanne students. No elementary courses offered in regular academic program. *Certificat d'études françaises* (French Studies) awarded after 2 semesters to those completing fulltime course. *Diplôme d'aptitude à l'enseignement du français, langue étrangère* (Aptitude for Teaching French as a Foreign Language) awarded after 2 additional fulltime semesters. Students who do not complete exams may receive an *Attestation* which will show courses in which they participated.
   Vacation courses in French Language & Literature also offered. Open to anyone 18 or older.
3. Institut de police scientifique et de criminologie (Institute of Police Science and Criminology). Attached to Faculty of Laws. Only such program in Switzerland. An 8-semester undergraduate course leads to *Diplôme d'études de police scientifique et de criminologie* (Scientific Police Studies & Criminology). Two-semester graduate course (open only to holders of the *Licence en droit, Licence en sociologie*, or *Diplôme fédéral de médecin*) leads to the *Diplôme d'études de criminologie*. A doctorate can also be obtained in the field.
4. Institut pour l'étude des méthodes de direction d'entreprise (IMEDF/Institute for the Study of Methods of Business Administration). Graduate level program in Business Administration. (See Business Administration, later in this chapter, for details.)

UNIVERSITÉ DE NEUCHÂTEL (University of Neuchâtel), avenue du 1er Mars 26, 2000 Neuchâtel. **Established:** 1909, by expansion of academy established in 18th century. **Jurisdiction:** Canton Neuchâtel. **Enrollment (1978-79):** 1,860 (19% foreign). **Faculty (1976-77):** 82 fulltime, 121 part-time. **Language of Instruction:** French. **Academic Year:** Late October-early July.

Admissions Requirements: One of the following: Federal Maturity Certificate, Neuchâtel Cantonal *Baccalauréat*, Neuchâtel Cantonal Commercial Maturity Certificate. The *Brevet bernois d'enseignement* (Bern Teacher's Certificate) and the *Patente di Maestro di Scuola Elementare* (Ticino Teacher's Certificate) are acceptable for admission to the Faculty of Science or the Faculty of Letters.

Grading and Transcripts: The grading scale, with suggested U.S. equivalent, is as follows: 6 = A; 5 = B; 4 = C; 3-1 = F. An average of 4 on each exam is required. The *Licence* and *Diplôme* will have a *mention* (grade) of either *très bien* (if general average is at least 5.5) or *bien* (if general average is at least 5). A *mention* also indicates no failures have been recorded.

An exam may be repeated three times for the *Licence* or *Diplôme*, and a maximum of twice for the doctorate. No indication of previous failure will be noted on the record. The *livret d'étudiant* (student booklet) will show all courses taken and the professor's signature, but no grades.

Required Examinations:

Faculty of Letters—Series of 4 exams required—(1) Exams on introductory courses (3 orals on philosophical, historical, and linguistic methods) required of all students, regardless of discipline, at end of 2nd semester. (2) Exams covering two principal disciplines and one minor discipline, at end of 4th semester. (3) Comprehensive exams at end of 7th or 8th semester. (4) Defense of thesis.

Faculty of Sciences—*Examen propédeutique*, at end of 4th semester, and *Examen final*, at end of 8th semester.

Faculty of Law and Economic, Political & Social Sciences—In Law program, there is one exam at end of studies. In programs in Economic, Political & Social Sciences, there are a series of exams at end of 4th semester. A *Certificat d'études préparatoires, première cycle* is given after these exams. Final exams are given at end of next 2 yrs.

Faculty of Theology—*Examens de contrôle*, series of exams at end of first 2 yrs, and *Examens de grade*, series of exams at end of 3rd and 4th yr of study.

NOTE: The University has a system of certification for segments of work. A certain number of certificates are required for entrance to each examination level. These certificates are known as *Certificat d'études supérieures* (indicates completion of at least 2 semesters' work in the subject) and *Certificat d'études préparatoires* (4 semesters' work).

Degrees & Certificates:

Two-Semester Degrees—*Certificat de formation complémentaire en psychologie et en pédagogie* (Supplementary Training in Psychology & Pedagogy/see Seminaire de Psychologie et Pédagogie under Special Programs below); *Certificat d'éducation physique* (for students training to be secondary school teachers/*not* the federal physical education teacher certificate); *Certificat d'études françaises* (French Studies); *Certificat d'études théologiques* (indicates completion of 1 yr of study in theology/open to students without usual university admission credentials).

Four-Semester Degrees—*Diplôme pour l'enseignement du français en pays de langue étrangère* (Teaching French in the Country of a Foreign Language); *Diplôme d'études théologiques* (continuation of course leading to *Certificat d'études théologiques*).

Six-Semester Degrees—*Certificat d'études supérieures de théologie* (Higher Studies in Theology); *Diplôme de science actuarielle* (Actuarial Science); *Diplôme d'orthophiste* (Speech Therapist); *Licence en droit* (Law).

Seven-Semester Degrees—*Licence ès lettres* (Letters, i.e., Humanities).

Eight-Semester Degrees—*Diplôme* (with field of science); *Ingénieur en microtechnique*

diplômé (Engineer in Microtechnique); *Licence en psychologie; Licence en psychologie du travail* (Industrial Psychology); *Licence ès sciences* (for those preparing to teach science); *Licence ès sciences économiques; Licence ès sciences naturelles; Licence ès sciences politiques; Licence ès sciences sociales; Licence en théologie.*

Ten-Semester Degrees—*Diplôme en psychologie du travail* (Industrial Psychology/2-semester program serves all French-speaking universities of Switzerland/*Licence en psychologie du travail* required for admission); *Licence en physique* (Physics).

Graduate Studies: A number of *troisième cycle* (third cycle) part-time programs are regularly offered for students with a first degree. A *Certificat d'études approfondies* (Advanced Studies) is awarded upon completion of the graduate specialization courses, which vary in length. Students studying for a doctorate may also enroll in these courses.

Doctoral Degrees: *Doctorat en droit* (Law); *Doctorat ès lettres; Doctorat en psychologie; Doctorat ès science; Doctorat ès sciences économiques; Doctorat ès sciences politiques; Doctorat ès sciences sociales; Doctorat en théologie.*

Special Programs:

1. Seminaire de Français Moderne (Seminary of Modern French). Part of Faculty of Letters. Open only to non-native speakers of French. No elementary courses offered during academic year. Open to both matriculated University students and others. Only matriculated students may receive *Certificat d'études françaises* (French Studies/awarded after 2 semesters' study—14 hrs per wk per semester) and the *Diplôme pour l'enseignement du français en pays de langue étrangère* (Teaching French in a Country of a Foreign Language/4 semesters—2 beyond the *Certificat* with minimum of 19 hrs per wk per semester the 2nd yr). Those who are not matriculated at the University receive an *Attestation* indicating coursework completed and examination results. A one-month summer course in French Language and Literature is open to anyone.
2. Seminaire de Psychologie et Pédagogie (Seminary in Psychology and Pedagogy). Research center. Offers program designed to permit study of psychology as part of *Licence* program in Faculty of Letters. Also offers courses in child and adolescent psychology and pedagogy to prospective secondary school teachers and awards the *Certificat de formation complémentaire en psychologie et en pédagogie* (Certificate of Supplementary Training in Psychology and Pedagogy) on completion of 2-semester program to those who hold secondary school matriculation certificates which would make them eligible for university admission. Enrollment in this short program also open to students at least 25 years old with practical teaching experience but who do not hold acceptable university admission credentials. Such students receive an *Attestation de formation complémentaire en psychologie et en pédagogie* (Attestation of Supplementary Training in Psychology and in Pedagogy) instead of the *Certificat*. Both the *Certificat* and the *Attestation* require a minimum of 2 semesters' study.

UNIVERSITÄT ZÜRICH (University of Zürich), Rämistrasse 71, 8006 Zürich. **Established:** 1833. **Jurisdiction:** Canton Zürich. **Enrollment (1978-79):** 13,928 (12% foreign); largest university in Switzerland. **Faculty:** 271 fulltime, 1062 part-time. **Library:** 1,400,000 volumes. **Language of Instruction:** German. **Academic Year:** Late October–mid-July.

Admissions Requirements: One of the following: Federal Maturity Certificate, Cantonal Maturity Certificate, Teaching Cantonal Maturity Certificate, Leaving Certificate of Lower Teaching Seminar, Zürich Primary Teacher Certificate. For the Faculty of Theology and the Faculty of Philosophy only, a Lower Secondary Teacher Certificate or a Primary Teacher Certificate from any canton is acceptable for admission. Applicants who have passed the full entrance exam *(Aufnahmeprüfung)* of Eidgenössische Technische Hochschule Zürich or Ecole Polytechnique Fédérale de Lausanne are admissible to all faculties except Medicine and Veterinary Medicine.

Those who have passed the *Aufnahmeprüfung* of the Hochschule St. Gallen may be admitted on that basis to the Faculty of Law and Public Economics.

Grading & Transcripts: The grading scale, with suggested U.S. equivalent, is as follows: 6 = A; 5 = B; 4 = C; 3-1 = F. The transcript *(Ausweis)* of both parts of the *Vorprüfung* will show marks in the required subjects in the field.[5]

Doctoral candidates receive a *Vorläufer Ausweis* (provisional certificate) on completion of studies. It shows the *Hauptfach* (major subject) and two *Nebenfächern* (minor subjects), the thesis *(Abhandlung)* title, and a grade on the following scale: A+ = *summa cum laude (vorzüglich)*; A− = *magna cum laude (sehr gut)*; B+ = *cum laude (gut)*; B = *rite (befriedgend)*. The final diploma is awarded after the thesis, in appropriate number of copies, has been deposited in the central library. The student has two years to accomplish this.

Required Examinations: *Vorprüfung* I, taken after minimum of 3 semesters; *Vorprüfung* II, after minimum of 5 semesters. In some faculties a *Zwischenprüfung* is required at end of 4 semesters. *Schlussprüfung* (final exam) is taken at the end of the last (8-12) semesters. Documentation of the results of all exams is routinely available.

In a number of departments, a different exam system is followed: when the student has completed a certain section of basic coursework, an *Akzessexamen* (access exam) must be passed before continuation to the higher level of the program. This exam may be taken as early as the end of the 1st year of study, but is more frequently taken at the end of the 2nd year. Grades on the exam may not regularly be available.

Degrees & Certificates:

Five- Six-Semester Certificates—*Fähigkeitsprüfung für Sekundarlehrer; Fähigkeitsprüfung für Fachlehrer auf Sekundarschulstufe*. (Described below under Special Program.)

Eight-Semester Degrees—*Diplom* (in Sciences); *Diplom für das Höhere Lehramt* (Diploma for upper secondary teacher/cantonal credential obtained by exam after receipt of first degree in an academic field); *Diplom für das Höhere Lehramt in den Handelsfächern* (Diploma for upper secondary school teacher of commercial subjects/cantonal credential obtained by exam after first degree); *Lizentiat* (given in Humanities, Law, Political Sciences, Theology); *Pfarrer* (Minister/Protestant, Evangelical-Reformed).

Ten-Semester Degree—*Zahnarzt* (Dentist).

Eleven-Semester Degree—*Apotheker* (Pharmacist).

Twelve-Semester Degrees—*Tierarzt* (Veterinarian); *Arzt* (Physician).

Doctoral Degrees: The doctorate is offered in all fields. Doctorates in Law and Theology do not require a first degree and may be completed in a minimum of 7-9 semesters. Normally, however, 10-15 semesters are required to complete these doctorates.

Special Program: Teacher preparation for lower secondary school teaching is offered. Requires 5 semesters for those entering with a Primary Teacher Certificate, and 6 semesters for others. Leads to two certificates: *Fähigkeitsprüfung für Sekundarlehrer* (Certificate Examination for lower secondary school teacher) and *Fähigkeitsprüfung für Fachlehrer auf Sekundarschulstufe* (Certificate Examination for subject teacher of lower secondary school). The secondary school teacher certificate may be taken in one of two areas: (1) Language & History—Requires preparation in one major subject (either French or German) and two minors (English, history, or Italian), and at least 20 weeks in a French-speaking country. (2) Mathematics & Natural Sciences—Requires one major subject (chemistry, mathematics, or physics) and two minors (biology—including anthropology—botany & zoology or geography) and at least 12 weeks in English-, French-, or Italian-speaking country. Seven weeks of practice teaching required for teacher credential certificate; 20 hrs for subject certificate.

5. The *Vorprüfung* II represents only completion of 2½ yrs of university-level work, but Universität Zürich English translations of the *Vorprüfung* II refer to it as the "Bachelor's."

University Degrees and Certificates: Placement Recommendations

NOTE: See University Individual Descriptions for length of programs leading to degrees and certificates. Placement recommendations for teaching credentials are given in Chapter III, those for professional medical degrees in Chapter V.

1. Students who have completed part of a degree program	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
2. One- or two-semester language courses	May be considered for undergraduate credit in foreign language determined by exam or syllabus review.
3. Four-semester certificates or diplomas	May be considered for undergraduate admission with up to 2 yrs of transfer credit on a course-by-course basis.
4. Five-semester certificates or diplomas	May be considered for undergraduate admission with up to 2½ yrs of transfer credit on a course-by-course basis.
5. *V...iplomprüfung* II/*Examen propédeutique* II	May be considered for undergraduate admission with up to 2 yrs of transfer credit on a course-by-course basis.
6. Six-semester degrees	
a. *Akademisch-technischer Assistent*	May be considered for undergraduate admission with up to 1½ yrs of transfer credit on a course-by-course basis.
b. Six-semester *Licence*	May be considered for graduate admission. Depending upon the relevancy of the *Licence* major to the graduate program, some undergraduate deficiencies may have to be made up.
7. Seven-semester degrees	May be considered for graduate admission.
8. Eight-, nine-, and ten-semester degrees	May be considered for graduate admission with transfer credit on a course-by-course basis.
9. A *Zeugnis/Certificat* from *postgraduiertem Studium/troisième cycle*	May be considered for graduate transfer credit on a course-by-course basis.
10. A certificate or a diploma from a 2- to 4-semester post first-degree (*Licence* or *Diplom*) program	May be considered comparable to a master's degree from a U.S. institution.
11. Doctoral degrees	May be considered comparable to a Ph.D. degree from a U.S. institution.

Education by Field in Universities and Other Institutions

Many areas of study which in the United States are offered in colleges and universities are taught in Switzerland in separate private or cantonal institutions, usually at the tertiary level, though sometimes incorporating the upper secondary level as well. The entrance requirements vary widely by program, and for the most part non-university tertiary study does not require a federal or cantonal maturity certificate. The most common admissions requirement is the federal Certificate of Proficiency (*Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità*) or the diploma from an upper secondary level continua-

tion education school which offers preparatory courses for the particular vocation. Additional specific entrance examinations are regularly required.

The best known types of non-university tertiary institutions are the higher schools of engineering *(Höhere Technische Lehranstalt/Ecole technique supérieure/Scuola Tecnica Superiore)*, the higher schools of business administration *(Höhere Wirtschafts- und Verwaltungsschule/Ecole supérieure de cadres pour l'économie et l'administration)*, and the higher schools of hotel administration. In order to present most clearly the complex intertwining of educational programs, each type of non-university tertiary institution is described below under academic subject headings. The status of the institution's program vis-a-vis any university or secondary vocational program in the same field is also described.

Agriculture *(Landwirtschaft/agriculture)*

Programs in agriculture range from a short 4-month course in the first year beyond the 9 yrs of compulsory education to advanced specialization courses for students with university degrees.

About half the cantons have agricultural vocational programs known as winter schools. They offer programs between November and March which can be completed in one year or in two consecutive years. The courses are offered in the 36 agricultural schools known as *Landwirtschaftliche Schule/Ecole d'agriculture/Istituto agrario*. Completion of compulsory education is usually the only admissions requirement. Most students entering winter school programs have completed the basic upper primary program in the compulsory years. (See Chapter II.) In some cases students are not permitted to enroll in a winter school program until they are 18 years old and have completed a 2-year apprenticeship which includes part-time school work. (See Vocational Secondary Education, Chapter II.) Agriculture schools also offer general short courses in particular specialties which are open to anyone with practical agricultural experience.

In addition to winter courses and general short courses, some of the agricultural schools offer a 2- or 3-year upper secondary program which includes educational studies and practical training. Upon completion, students receive an *Abschlusszeugnis* or *Diplom* (Leaving Certificate or Diploma) and may also qualify for a Certificate of Proficiency.

It is possible to enroll for further study in specialization short courses leading to the *Meister/Maîtrise* examination 6 years after obtaining the Certificate of Proficiency. This is a cantonal examination which qualifies an individual both to direct agricultural schools and to train apprentices. The courses leading to this exam are usually offered in the general agricultural schools. Specialized courses in dairying are offered in two special schools: Ecole d'industrie laitière, Canton Fribourg, and the Milchwirtschaftliche Fachschule, Canton Luzern.

Five higher schools of agriculture *(Höhere Landwirtschaftliche Schule/Ecole supérieure d'agriculture)* offer more advanced training (tertiary level). As yet, no schools of this type exist in the Italian-speaking regions. The five schools have federal recognition and are considered in Switzerland at the same educational level as the higher schools of business administration and the higher schools of engineering—i.e., beyond secondary education but not at the university level of the agronomical section of the Eidgenössische Technische Hochschule Zürich. Each of the agricultural schools offers particular areas of specialization.

The programs are divided into two parts, each of which lasts three semesters. The first part covers basic instruction (39 hrs per semester) in general and agricultural subjects culminating in an exam in agricultural economics, biology, and physics. In the second half of the program, the student concentrates on a specialization. The final diploma exam is both oral and written and covers six subjects.

Admission to the higher schools of agriculture normally requires a Certificate of Proficiency in an agricultural field related to the student's proposed field of study. (See section on Vocational Upper Secondary Education, Chapter II.) Holders of federal or cantonal maturity certificates or cantonal teacher's certificates are admissible if they have had 1 to 2 years of practical experience in an agricultural field. An additional entrance exam which includes biology, chemistry, French, German, mathematics, and physics is standard for all applicants. The science and math exams are considered to be at the academic level of the top stream of the Swiss 9th grade. The agricultural schools at Lullier and Zollikofen offer a 3-month intensive course to prepare applicants for the entrance exam.

Prior to 1979, the higher schools of agriculture awarded the degree of *Ingenieur-techniker* HLS/*Ingénieur-technicien* ESA (Technical Engineer). In 1979 the degree was changed by federal regulation to *Ingenieur HTL*/*Ingénieur* ETS.[6] There is no difference in the academic requirements for the two designations. The change officially indicates the equality of this 3-year degree with that earned for the 3-year programs of the higher schools of business administration and the higher schools of engineering.

The grading scale at all higher schools of agriculture, with suggested U.S. equivalent, is as follows: 6 = A; 5 = B; 4 = C; 3 = D; 2-1 = F. An overall average of 4.0 in all courses is required for a degree, and no more than two grades of 3.0 are permitted. Exams may be repeated once.

Higher Schools of Agriculture and Fields of Specialization

1. Schweizerisches landwirtschaftliches Technikum; also known as Technicum agricole Suisse or Höhere Technische Lehranstalt der Landwirtschaft HLS (Swiss Agricultural Technical Institute), Länggasse 85, 3052 Zollikofen, Canton Bern. Est 1969. Language of Instruction: French & German; officially bilingual. Specializations: agricultural economics, animal production, dairying, vegetable production.
2. Technicum Horticole ETS/Horticultural Technicum (Horticultural Technical Institute), 1254 Lullier, Canton Genève. Language of Instruction: French. Specialization: horticulture, landscape architecture.

   There is also an upper secondary vocational program in the affiliated Ecole d'Horticulture. The Technicum Horticole and the Ecole d'Horticulture together form the Centre Horticole de Lullier.
3. Technikum HTL für Obst-, Wein- und Gartenbau Wädenswil/Ecole Technique Supérieure ETS d'Arboriculture, de Viticulture et d'Horticulture Wädenswil/Scuola Tecnica Superiore STS di Fruitticoltura, Viticoltura e Hortocoltura/Wädenswil (Technical Institute for Fruit, Wine, & Grape Production of Wädenswil), P.O. Box, 8820 Wädenswil. Language of Instruction: German. Affiliated apprenticeship program. Specialization: fruit production, wine processing, horticulture.
4. Technicum supérieur des branches agricoles spéciales ETS de Changins-Nyon (Higher Technicum of Special Agricultural Branches of Changins-Nyon), 1260 Nyon, Canton Vaud. Language of Instruction: French. Specializations: fruit production, wine processing, arboriculture.

   The affiliated Ecole supérieure de viticulture, d'oenologie et d'arboriculture (Higher School of Grape Growing, Wine Processing & Tree Cultivation) offers a 32-wk part-time vocational program leading to a *Diplôme de viticulture et d'oenologie* (Diploma of Grape-growing and Wine-making), a vocational Master Craftsman diploma. Admission to course requires Certificate of Proficiency in related field.

6. HLS: *Höhere Landwirtschaftschule;* ESA: *Ecole supérieure d'agriculture;* HTL: *Höhere Technische Lehranstalt;* ETS: *Ecole technique supérieure.*

5. Technicum de viticulture, d'oenologie et d'arboriculture (Technicum of Grapegrowing, Wine Processing & Tree Cultivation), Montagibert, 1000 Lausanne, Canton Vaud. Language of Instruction: French. Specializations: fruit production, wine processing, arboriculture.
6. Schweizerische Tropeninstitut/Institut Tropical Suisse[7] (Swiss Tropical Institute), Socinstrasse 57, 4051 Basel. Est 1943. Offers advanced programs ranging from short courses of 2-3 months' duration to a 1-yr program in tropical agronomy, as well as in tropical medicine. One-year program leads to the *Diplom als Tropen-Agrotechniker*. After 1980, the course will become a 2-yr diploma program. The present 1-yr program is open to those with maturity certificates, certificates of proficiency, and diplomas from the agricultural, engineering, or business administration schools, and to university graduates. The Institute is also open to those doing research for doctoral degrees elsewhere. No doctorate is granted by the Institute. (The Institute's tropical medicine program is described in Chapter V.)

University-Level Agricultural Programs

Eidgenössiche Technische Hochschule Zürich is the only university-level institution offering studies in the field of agriculture. Admission: Federal Maturity Certificate or acceptable equivalent. The 8-semester program leads to the *Diplom Ingenieur-Agronom* (Diploma of Agronomical Engineer). Curriculum includes courses in various aspects of agriculture such as animal breeding & nourishment, entomology, microbiology, plant cultivation, plant pathology, and business management, as well as foundation courses in economics, mathematics, and sciences. Research thesis required for the *Diplom*.

It is also possible to prepare for a teaching certificate for agricultural education (*Fähigkeitsausweis für Lehramt an landwirtschaftlichen Schulen)* as part of the degree program. (This institution is discussed in more detail under University Individual Descriptions in the first part of this chapter.)

AGRICULTURE: PLACEMENT RECOMMENDATIONS

1. Winter school courses	May be placed in grade 10.
2. *Abschlusszeugnis/Diplom* from an upper secondary agricultural program	May be placed in grade 12.
3. Certificate of Proficiency (*Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità)*	
a. awarded after 2 yrs' training	Primarily a vocational qualification. May be placed in grade 10 or 11, based on review of program content.
b. awarded after 3 or 4 yrs' training	May be considered for freshman admission where vocational training is considered appropriate preparation.
4. *Meister/Maîtrise* (Master)	May be considered to have completed advanced vocational training. Not an academic qualification.
5. *Ingenieur* HTL/*Ingénieur* ETS*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
6. *Diplom Ingenieur-Agronom* (ETH)	May be considered for graduate admission with transfer credit on a course-by-course basis.

7. In 1981 this school will become the Technikum für Tropische Landwirtschaft, with federal recognition.

7. *Diplom als Tropen-Agrotechniker*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
8. *Diplôme de viticulture et d'oenologie*	May be considered to have completed advanced vocational training. Not an academic qualification.

*Previously known as *Ingenieur-techniker* HL/*Ingénieur-technicien* ESA.

Architecture (*Architektur/Architecture*)

The highest professional training in architecture is offered in the university-level institutions. Graduates of these programs are trained to take full responsibility for architectural projects. All require the Maturity Certificate or its equivalent for admission.

University Architecture Programs

1. Ecole Polytechnique Fédérale de Lausanne. Five-yr program leads to degree of *Architecte (arch. dipl.* EPF). There are 4 yrs of coursework, including diploma project, and 1 yr of practical experience, usually between 3rd and 4th yrs. Two doctoral degrees, *Docteur ès sciences techniques (Dr.ès sc. techn.)* and *Docteur ès sciences (Dr. ès sc.)* may be obtained with additional 4-8 semesters of study and a dissertation.
2. Eidgenössische Technische Hochschule Zürich. Program leads to degree of *Architekt (Dipl. Arch.* ETH). Requires 5 yrs, 4 of coursework, including diploma project, and 1 yr of practical experience. Six to ten semesters' additional study and a dissertation lead to the *Doktor der Technischen Wissenschaften (Dr.sc.techn.)*. The Institut für Orts-, Regional- und Landesplanung, attached to the University, offers several interdisciplinary graduate level part-time courses in Land Planning and Problems of Development, which lead to a certificate.
3. Ecole d'Architecture, Université de Genève. Five-year program leads to *Diplôme d'architecte* and includes minimum of 3 months' practical experience. The school also awards a *Certificat d'études* (Certificate of Study) to University students in other programs who have completed a section of work in architecture. No doctoral studies in architecture offered at the Université de Genève.

Tertiary Non-University Programs

Architecture can also be studied in most of the higher schools of engineering. (See Engineering below.) The architectural course in these schools is of 3 yrs' duration and leads to the degree of *Architekt* HTL/*Architecte* ETS.[8] Admission is based on a Certificate of Proficiency in a vocational field, and an entrance exam. Graduates of these programs are highly trained in all technical aspects of architecture. It is possible (but very unusual) for a student with this degree to continue study in one of the university programs after a year of additional preparatory study in the sciences and mathematics. (German-speaking students complete the preparatory study at Winterthur Ingenieurschule HTL; French-speaking students at the Ecole Polytechnique Fédéral de Lausanne.) The student would then enter the university at the beginning of the 3rd year of the 5-yr architectural diploma program.

8. HTL: Höhere Technische Lehranstalt; ETS: Ecole technique supérieur.

ATHENAEUM ÉCOLE D'ARCHITECTURE LAUSANNE

VU LE PROCÈS-VERBAL DES ÉPREUVES THÉORIQUES ET PRATIQUES PASSÉES DEVANT LA COMMISSION D'ÉTUDES, ET VU LE PROCÈS-VERBAL DU JURY D'EXAMENS, CE

DIPLÔME
ARCHITECTE DE BÂTIMENT

né le 12 février 1954, originaire de Granges VS

No. 6. *Diplôme d'Architecte de Bâtiment*

A few private schools grant diplomas and certificates in architecture. They do not have federal or cantonal recognition. Admissions requirements and training facilities vary markedly. Standards are not monitored by cantonal authorities. A diploma or certificate from such a school can be identified by the absence of a heading indicating "Swiss Confederation" or the name of a particular canton. A cantonal signature and/or stamp may appear, but only to certify signatures on the diploma. For an example, see Document 6.

ARCHITECTURE: PLACEMENT RECOMMENDATIONS

1. Certificate of Proficiency (*Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità*)	
a. awarded after 2 yrs' training	Primarily a vocational qualification. May be placed in grade 10 or 11, based on review of program content.
b. awarded after 3 or 4 yrs' training	May be considered for freshman admission where vocational training is considered appropriate preparation.
2. *Architekt* HTL/*Architecte* ETS	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
3. *Architecte (arch.dipl.* EPF)/*Architekt (Dipl.Arch.* ETH)/*Diplôme d'architecte* (Université de Genève)	May be considered for graduate admission.
4. *Certificat d'études* (Université de Genève)	May be considered for undergraduate transfer credit on a course-by-course basis.

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5. *Docteur ès sciences/Docteur ès sciences techniques/Doktor der Technischen Wissenschaften*	May be considered to have a degree comparable to a Ph.D. from a U.S. institution.
6. Diploma from private school without federal or cantonal recognition	May be considered on the same basis as students from nonaccredited U.S. institutions.

Art *(Kunst/Arts)*

Art history programs are offered in the universities. Studio art is, however, not taught in the universities but rather in separate art schools, many of which also offer vocational upper secondary programs in art. Subjects taught include art restoration, ceramics, engraving, fashion design, graphics, industrial design, interior architecture, jewelry making, metalwork, painting, photography, pottery, scientific drawing, sculpture, and textile design. Admission is open to those who have completed the 9 years of compulsory schooling. A satisfactory example of personal artistic work is also required. The programs concentrate on the artistic area chosen, but include classes in the native language, as well as commercial courses, and economics. The federal Certificate of Proficiency (in the designated field) is received on successful completion of the course.

1. Académie cantonal des Beaux-Art du Valais (Cantonal Academy of Fine Arts of Valais), rue des châteaux 14, 1950, Sion.
2. Centro scolastico per le industrie Artistiche (Scholastic Center for Artistic Industry), via Ranchetto 14, 6900 Lugano. A cantonal school in the Italian-speaking region under the direction of the Ticino Department of Public Education. Students may enter the 1-yr preparatory course at age 15 immediately on completion of compulsory schooling. This course is followed by 3-, 3½-, and 4-yr professional courses in different artistic fields which lead to the *licenza* of the school and an *Attestato di capacità* (Certificate of Proficiency). In the field of decorative arts, only the *licenza* can be obtained. Advanced specialization courses of 1 to 2 yrs are also offered; they are open to those with a *licenza* from the school, or a recognized equivalent.
3. Corso di avviamento (Course of Vocational Training), via Industrial, 6900 Lugano. Vocational upper secondary program for apprentices in art-related fields.
4. Ecole cantonale d'Arts visuels Bienne/Kunstgewerbeschule Biel (Cantonal School of Visual Arts of Bienne), rue Wasen 5, 2502 Bienne/Wasenstrasse 5, 2502 Biel. Affiliated with the Ecole d'Ingénieurs Bienne. Offers a 2-semester preparatory course for those 15 years old, directly on completion of compulsory school. This course can be followed by an 8-semester program in the professional area of graphics which leads to the Certificate of Proficiency in Graphics.
5. Ecole cantonale des Beaux-Arts et d'Arts appliqués (Cantonal School of Fine Arts and Applied Arts), Avenue de l'Elysée 4, 1006 Lausanne. Est 1821. The school has three sections: Fine Arts; General Artistic Studies; Applied Art. A 1-yr preparatory class (39 hrs a wk for 2 semesters) prepares students for any of the three sections. The Fine Arts and Applied Art sections both offer 4-yr programs (hrs of class per wk range from 38 to 46). The General Artistic section offers a 3-yr diploma program (40 hrs per wk average class load). Admission to the Fine Arts and Applied Arts programs is open to those 18-25 years of age who have passed the preparatory course or present evidence of equivalent training. Only the General Artistic section requires a specific upper secondary credential, which is one of the following: Federal or Cantonal Maturity Certificate, cantonal *Baccalauréat*, a Diploma of General Culture, or a Primary School Teacher Certificate.
6. Ecole d'animateurs (School of Animation Artist-) 28, rue Prévost-Martin, 1211a Genève 4. Affiliated with the Institut d'études sociales (Institute of Social Studies). Has cantonal recognition. Offers vocational training for social-cultural

animation project work. Admission requires one of the following: Federal or Cantonal Maturity Certificate, Diploma of General Culture, *Diplôme de commerce* (Commercial Diploma), or a Certificate of Proficiency for a program of at least 3 yrs' duration.

Studies include accounting & business, economics, law, mass media, personnel work, psycho-pedagogy, psycho-sociology, sociology, and techniques of expression and animation. A 3-yr program leads to the *Diplôme en animateur socio-culturel* (Diploma in Socio-Cultural Animation).

7. Ecole d'art de Genève (Two separate schools described below under "a" and "b.")
   a. Ecole des arts décoratifs (School of Decorative Arts), 2 rue Général Dufour, 1204 Genève. Primarily vocational upper secondary programs. A 1-yr preparatory course is open to those 15 years of age who have completed compulsory school. Holders of a Maturity Certificate or a federal Certificate of Proficiency may be admitted to courses at an advanced level. The school grants a *diplôme* on completion and also prepares students for the federal Certificate of Proficiency as a jeweller, a ceramist, interior designer, or graphic artist, as well as for a diploma as Interior Architect. Coursework in all programs, in addition to the specialization, includes economics, French, and mathematics. Receipt of the school *diplôme* gives eligibility for admission to the higher level Ecole supérieure d'art visuel (see "b" below). The Interior Architect program alone requires a federal Certificate of Proficiency as interior designer (or the equivalent, judged by the school) to enter, and requires 3 yrs of further tertiary-level training.
   b. Ecole supérieure d'art visuel (Higher School of Visual Art), 9, boulevard Helvétique, 1205 Genève. The school offers two 8-semester programs:
      1) Artistic training, 28 hrs a wk for 4 yrs, leading to *Diplôme de type A: formation simple de création artistique* (Diploma of Type A: Basic Training for Artistic Creation).
      2) Combination of artistic training and art teacher training (including practice teaching), 32 hrs a wk for 4 yrs, leading to *Diplôme de type B: formation double de création et d'enseignement artistique* (Diploma of Type B: Double Training in Artistic Creation and Teaching).

      Admission to either diploma program requires a Maturity Certificate or recognized equivalent or a Certificate of Proficiency from a school of applied arts. All applicants must present a portfolio of personal art work.

      An advanced program leading to the degree of *Maître de Dessin* (Teacher of Art), which qualifies the holder to teach in upper secondary school and requires the *Diplôme de type B* for admission, is also offered and requires 2 additional years of study. The 1st year includes courses in pedagogy and practice teaching. The 2nd year is spent in supervised teaching only.

      Graduate level work *(troisième cycle)* may be taken at the school, but no advanced degree is conferred beyond the *Maître de Dessin*.

10. Ecole technique supérieure de l'industrie graphique ETS/Höhere Technische Lehranstalt der grafischen Industrie HTL (Higher School of Graphics Industry), rue de Genève 63, 1004 Lausanne. Considered to be on academic level of the higher schools of engineering (see section on Engineering below) and is usually included in any listing of those schools. Officially bilingual; instruction in French & German. Admission: One of the following: Certificate of Proficiency in field within graphics industry, with at least 4 yrs' practical experience during apprenticeship; Certificate of Proficiency in commercial field; secondary school Commercial Diploma, with 2 yrs' practical experience; Maturity Certificate, with one yr of experience. Admissions exam also required, except for those holding Certificate of Proficiency for the graphics industry. The exam covers algebra, calculations, French, geometry, German, mathematics. Program of study requires 6 semesters (39 wks a yr for 3 yrs) and leads to the degree of *Ingénieur* ETS/*Ingenieur* HTL.

11. Gewerbliche Berufsschule St. Gallen (Technical Vocational School of St. Gallen), Demutstrasse 115, 9012 St. Gallen. The school has a section offering training in

the arts. One-year preparatory program open to those 15 or older who have completed compulsory school. Also open to those with vocational or general education background. Program divided into trimesters with 40 hrs per wk of instruction. Certificate given for each semester's work. Fulltime upper secondary vocational programs offered in graphics and in painting, each requiring 4 yrs and leading to Certificate of Proficiency in selected field.

12. Kunstgewerbeschule der Stadt Bern (Art Technical School of the City of Bern), Postfach 53, 3000 Bern 25. The Keramische Fachschule (Ceramic Subject School) is a section of this school. One-year preparatory course open to all students who have completed compulsory schooling. Preparatory program includes general studies in English (elective), French, German, mathematics, gymnastics, and sports, as well as technical drawing. On completion of the preparatory course, students may take an entrance exam for the city's fulltime vocational teaching workshop (*Lehrwerkstätte*/See Vocational Upper Secondary Education, Chapter II) or a kindergarten teaching seminar (*Kindergartenseminar*/see Kindergarten Teachers, Chapter III).

    Eight-semester program offered in graphics and ceramics. Open to those who have completed the preparatory course or who have a Certificate of Proficiency in related field. The program (43 lecture hrs a wk for 3 yrs) includes courses in graphics, business practices, civics & economics, general arithmetic, German, and physical education. Four-week period of practical training expected during vacation period. The program leads to a certificate and possibly to the Certificate of Proficiency.

    A 10-semester art teacher's (*Zeichenlehrer*) program is offered in the affiliated *Zeichenlehrerseminar* (Art Teacher Training Seminar), a branch of the Department for Higher Secondary School Teachers of the Universität Bern. The program includes intensive training in art, art history, and pedagogy. Admission requires a Primary School Teacher Certificate or a Maturity Certificate. It is also possible to obtain the *Zeichenlehrer* certificate while also a matriculated student at Universität Bern.

    There is an affiliated *Technikerschule* (Technician's School) open to students who have completed apprenticeships in printing or similar industries. The course requires 6 semesters of 20 wks each and leads to a *Diplom "Techniker der Druckindustrie"* (Diploma of Technician in the Printing Industry), an advanced vocational certificate.

    The grading scale at the school, with suggested U.S. equivalents, is as follows: 6 (*ausgezeichnet*) = A; 5.5 (*sehr gut*) = A−; 5 (*gut*) = B; 4.5 (*ziemlich gut*) = B−; 4 (*genügend*) = C; 3 (*ungenügend*) = D; 2 (*sehr schwach*) = F; 1 (*unbrauchbar*) = F. There is a *Promotionsprüfung* (promotion exam) at the end of each semester. Promotion to the next semester requires an average of at least 4.0. One grade of *ungenügend* is permitted with an average of all grades of 4.2, two with an average of 4.6, none with an average of 4.0. The final exam (*Diplomprüfung*) is based on a thesis, on which a grade of at least 4.0 is required for a pass.

13. Kunstgewerbeschule, Schule für Gestaltung, Basel (Art Technical School, School for Painting, Basel), Vogelsangstrasse 15, 4021 Basel. Offers 1-yr preparatory course (*Vorkurs*) to those 15 or older on completion of compulsory school. Vocational courses in graphics and textiles offered. Graphics course requires 6 additional semesters of fulltime (40-42 hrs per wk) study beyond the preparatory course; textile course requires 7 additional semesters. Both lead to cantonal diploma and Certificate of Proficiency. Students must be 18 and have completed the preparatory course to enter. Two-year programs in painting (*Gestaltung*) and dress design (*Mode-Entwerfen*) also offered to those over 18. Both lead to Certificate of Proficiency.

    Art teacher (*Zeichenlehrer*) training also offered. Requires 3 yrs of study in this school, followed by 1 yr in cantonal *Lehrerseminar* (teacher training seminar). Admission to this program requires a Maturity Certificate or Primary School Teacher Certificate. The diploma is the *Fachlehrer für bildende Kunst* (Subject Teacher for Teaching Art).

14. Kunstgewerbeschule Biel. (See Ecole cantonale d'Arts visuels Bienne, No. 4.)
15. Kunstgewerbeschule, Luzern (Art Technical School, Luzern), Rossligasse 12, Luzern. Cantonal school offering 1-yr preparatory course and upper secondary vocational courses in painting, graphics, and textiles. Art teacher training also offered. Admission requirements, programs, and certificates same as for No. 13.
16. Kunstgewerbeschule der Stadt Zürich (Art Technical School of the City of Zürich), Ausstellungsstrasse 60, 8031 Zürich. Cantonal school offering 1-yr preparatory course to those 15 or older on completion of compulsory school, and upper secondary vocational courses in fashion design, graphics, industrial design, interior architecture, jewelry and metal work, photography, and scientific design. Art teacher training programs also offered for which the Maturity Certificate or Primary School Teacher Certificate, as well as completion of the preparatory course, is required for admission. The school also offers programs for handicraft teacher training, both at the beginning level and as a program of further study for certified teachers.

ART: PLACEMENT RECOMMENDATIONS

1. Preparatory Course	May be placed in grade 11.
2. Certificate of Proficiency *(Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità)* in artistic fields	May be considered for freshman admission where vocational training is considered appropriate preparation.
3. *Ingenieur HTL/Ingénieur ETS*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
4. *Diplôme/Diplom* from 4-yr tertiary program	
a. Genève, Type A or B	May be considered for graduate admission.
b. Lausanne, Diploma from General Artistic Section	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
5. *Zeichenlehrer/Maître de dessin*	May be considered for graduate admission.
6. *Licenza/Diplôme*	May be considered for freshman admission where vocational training is considered appropriate preparation.
7. *Diplôme en animateur socio-culturel*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
8. Advanced Vocational Training Certificate, e.g., *Diplom Techniker der Druckindustrie, Diplôme d'architecture intérieure,* etc.	May be considered to have completed advanced vocational training. Not an academic qualification.

Business Administration and Commerce[9]

Opportunity for training in business administration and commerce exists at all educational levels, ranging from an apprenticeship entered on completion of compulsory education to the doctorate. The level of training needs to be clearly identified.

9. There are a number of German words relating to this field that are frequently used. French and Italian words are usually cognates. Useful translations include the following: *Handel* (business or commerce); *Kaufmännisch* (commercial); *Wirtschaft* (trade and industry or economics); *Verwaltung* (administration or management).

Upper Secondary Programs

An apprenticeship in business is a frequent choice of graduates of intermediate lower secondary schools (grade 9). Such students enter an apprenticeship contract with a business and attend school one day a week at a business vocational school known as *Kaufmännische Berufsschule/Ecole professionnelle commerciale/Scuola professionale*. On completion of the apprenticeship, normally requiring 3 years, they receive the Certificate of Proficiency in a business field.

It is also possible to enter fulltime commercial upper secondary schools at the end of grade 9. These schools are known as *Handelsschule/Ecole supérieure de commerce/Scuola di commercio*. (They may be separate cantonal schools or a section of the general cantonal school). There are also a number of private commercial schools, without cantonal recognition.

A 3- or 4-yr commercial program leads to a *Diplom* or *Handelsdiplom/Diplôme de commerce/Diploma commerciale;* a 4-yr commercial program in a cantonally recognized school leads to the *Handelsmaturität/Maturité commerciale/Maturità commercio* (Cantonal Commercial Maturity Certificate). Document 7 shows a 3-yr *Diplom* obtained by a student in a cantonal school. Document 8 shows a 3-yr *Diplom* obtained by a student in a private commercial school. The 3- and 4-yr programs may be offered in the same school. However, a school which incorporates the word "diploma"in its name, e.g., *Handelsdiplomschule*, would not offer a Cantonal Commercial Maturity Certificate.

Both the 3- and 4-yr programs include instruction in several languages, usually French, German, and English, as well as accounting, business arithmetic, economic geography, industrial management, and stenography and typing. Documents 7 and 8 show the material covered in the programs of the two schools.

The 3- or 4-yr diploma is considered the equivalent of a Certificate of Proficiency which an apprentice in a commercial field obtains. Graduates of the 3- or 4-yr fulltime commercial program (in a *Handelsdiplomschule/Ecole de Commerce/Scuola di commercio*), the 3-yr part-time apprenticeship program leading to a Certificate of Proficiency, or the

DIPLOM

78

von — _____ geboren den 25. MAI 1956 _____

eingetreten im MAI 1973 in die Handelsabteilung der Kantonsschule hat heute die vorgeschriebene Diplomprüfung bestanden und auf Grund derselben und früherer Schulleistungen folgende Noten erhalten:

(6 bedeutet die beste, 1 die geringste Leistung)

Betriebswirtschaftslehre und Rechtskunde	5
Buchhaltung	5
Kaufmännisches Rechnen	5
Wirtschaftsgeographie	5
Deutsch	5
Französisch	5
Englisch	5
Italienisch	5
Spanisch	5
Geschichte und Staatskunde	5
Chemie und Warenkunde	5
Handschrift	5
Zierschrift und angewandtes Zeichnen	5
Stenographie und Maschinenschreiben	5
Turnen	5

Dieses Diplom wird vom Bund als Fähigkeitsausweis im Sinne von Artikel 35, Absatz 1 des Bundesgesetzes vom 20. 9. 1963 über die Berufsbildung anerkannt.

Trogen, den 25. MÄRZ 1976

Der Erziehungsdirektor:

Der Rektor:

No. 7. *Diplom*—Three-Year Diploma, Cantonal

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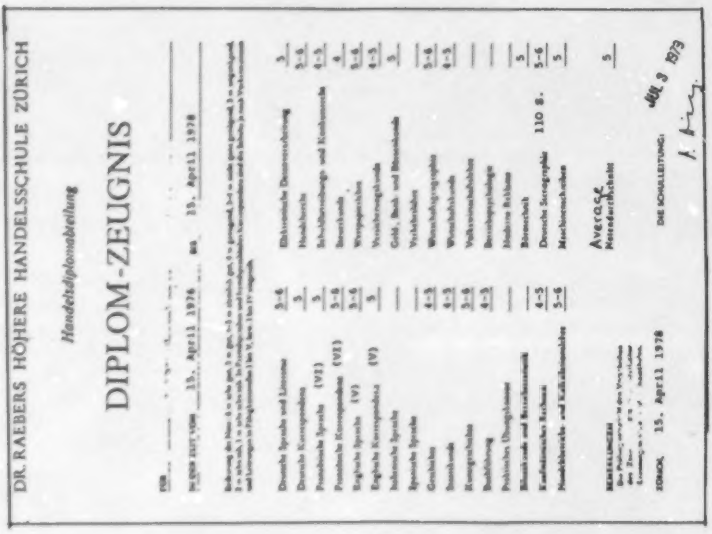

DR. RAEBERS HÖHERE HANDELSSCHULE ZÜRICH

Handelsdiplomabteilung

DIPLOM-ZEUGNIS

No. 8. *Diplom-Zeugnis*—from Private Commercial School

4-yr cantonal commercial maturity program (in a *Handelschule/Ecole de Commerce/Scuola di commercio)* are all equally eligible to enter the *Höhere Wirtschafts- und Verwaltungsschule* (higher schools of business administration). Those with the 4-yr Cantonal Commercial Maturity Certificate are often also admissible to certain faculties of Swiss universities with supplementary examinations. (See admissions requirements in the descriptions of each university.)

Commercial upper secondary education also includes the *Verkehrsschule/Ecole d'administration/Scuola cantonale di amministrazione* (administration school). This 2-yr program in transportation and communication is usually part of a cantonal commercial school and leads to a certificate. Graduates enter employment in communications (rail and telegraph), customs service, the national railroad, Swissair, and Swiss radio. They are not eligible for admission to a university or a higher school of business administration on the basis of this diploma.

Tertiary Non-University Education

Höhere Wirtschafts- und Verwaltungsschule (HWV)/*Ecole Supérieure de cadres pour l'économie et l'administration* (ESCEA)/*Scuola superiore per i quadri dell'economia e dell'amministrazione* (SSQUEA) (higher school of economics and business administration). Business administration and commerce education at a higher non-university level. Such schools, designed to train students for middle management, are a recent development (1968). Prior to their establishment, there were only two possibilities for further specialization in business fields: vocational training for specialists, such as chartered accountants, controllers, etc., or full university programs in economics. All six of the present schools come under the federal vocational training laws; all are in German-speaking cantons. A school in Lausanne is to be opened in 1980 for students in French-speaking cantons. Total enrollment in the six schools is now approximately 700 with a ratio of men to women of about 50 to 1.

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Admission to the higher schools of economics and business administration requires a commercial secondary school diploma, a federal or cantonal Maturity Certificate, or a Certificate of Proficiency in a commercial field. The six higher schools offer a 3-yr fulltime program. A few offer also a 4½ yr part-time evening program, which is the equivalent of the fulltime program. Primary emphasis is on practical training, especially the analysis of business problems, the determination of business policy, and the cultivation of skills and judgment involved in business management. Courses in electronic data processing, financial and cost accounting, fundamentals of business organization, human behavior in management, marketing, and public administration are included. Table 6 shows a typical program.

The degree awarded upon completion of the program is *Betriebsökonom* HWV/ *Economiste d'entreprise* ESCEA/*Economista aziendale* SSQUA (Business Economist).

Table 6. **Höhere Wirtschafts- und Verwaltungsschule (HWV) (Higher Economics and Business Administration School) Program in Marketing**

	Hours Per Week		
	1st year	2nd year	3rd year
Economics	5	4	4
Economic Geography	2	–	–
Law	3	–	–
Taxation	–	2	1
Fundamentals of Organization	1	2	–
Industrial Seminar	–	1*	–
Business Seminar	–	–	2
Human Behavior in Management (Psychology)	–	2	2
Financial & Cost Accounting:			
—Financial Accounting	4	–	–
—Balance-Sheet Analysis	2	–	–
—Cost Accounting	1	2	2
—Electronical Data Process.	–	3	2
Mathematics & Statistics:			
—Mathematics	4	3	2
—Statistics	–	2	–
Marketing:			
—Marketing	–	2	1
—Advertising	–	–	1
—Market Research	–	–	1
—Distribution	–	–	1
—Brand Policy	–	–	1
—Marketing Seminar	–	–	3
History & Politics	2	2	–
German	3	2	2
English (advanced)	2	2	2
Total	29	28-29	27

*Fall term only.

The Business Economist degree does not lead to further university-level study. It represents completion of a level of study between the academic secondary school certificates and the first university degree, and is considered at the same academic level as the Engineer degree from the higher schools of engineering.

The grading scale, with suggested U.S. equivalent, is as follows: 6 *(ausgezeichnet)* = A+; 5 5 *(sehr gut)* = A−; 5 *(gut)* = B+; 4.5 *(ziemlich gut)* = B−; 4 *(genügend)* = C; 3 *(ungenügend)* = D; 2 *(sehr schwach)* = F; 1 *(unbrauchbar)* = F. An average of 4.0 in all courses is required to pass. Only two grades of 3, and no more than one grade below 3.5, are permitted.

The six higher schools of economics are all called *Höhere Wirtschafts- und Verwaltungsschule*. They are located in the cities of Aargau-Solothurn, Basel, Bern, Luzern, St. Gallen, and Zürich.

University-Level Education

Each of the seven cantonal universities and the Hochschule St. Gallen offers a first degree and the doctorate in economics. The Hochschule St. Gallen was established to provide advanced training in economics and business and its whole program of studies is so oriented. (See individual university listings for details of each school's program.)

There are also three graduate level business administration schools with cantonal recognition, which are comparable to graduate schools of business in the United States. The program at two of these schools is based primarily on the American case method type of instruction and instruction is in English. The three schools are described below.

1. Centre d'études Industrielles (CEI/Center for Industrial Studies; also translated as Center for Education in International Management), 4, chemin de Conches, 1231 Genève. Est 1946 by Alcan Aluminium Ltd. Now independent, it affiliated with the Université de Genève in 1956. Receives support from international companies and business firms, plus substantial revenue from student fees (22,000 Swiss francs, approximately U.S. $14,300). Enrollment: 30-45 representing 20 nationalities. Language of instruction: English. Academic Year: September-May. Program may, however, be taken in two parts known as modules. At end of Module I (Sept. to mid-Dec., 15 wks), student may return to business for up to 3 yrs before returning to complete Module II (Jan.-May). At end of Module II, a month's consulting project is undertaken, usually outside of Switzerland.

   Admission: Normally limited to those who hold a university first degree, have had 5 yrs' experience, and who expect to work in international business. The Graduate Management Admissions Test (GMAT) also required of all applicants.

   Degrees: Until 1978, the degree, awarded jointly with the Université de Genève, was the *Diplôme en administration industrielle*. The Institute now awards a Master of Business Administration. The CEI considers the degree equivalent to a U.S. Master of Business Administration degree. The few students admitted without a first university degree receive a certificate from the Institute on completion of the same program instead of the University diploma. A certificate of completion is also given those who complete only Module I. CEI also offers about 20 general management programs annually, each several weeks in length. No degrees are awarded for these studies.

2. Institut pour l'étude des méthodes de direction de l'entreprise (IMEDE/Institute for the Study of Methods of Business Management; also known as International Management Development Institute), Campagne de Bellerive 23, ch. de Bellerive, 1001 Lausanne-Ouchy. Est 1957, to serve international companies by training managers and career executives. Now affiliated with the Université de Lausanne. Language of Instruction: English. Three major programs offered, in addition to shorter courses and seminars:

   • Degree Program in Business Administration. An 11-month (Jan.-Dec.) basic course for young executives, age 25-35. Enrollment (1979-80): 45 (40 foreign). Tuition

(1980-81): 15,300 Swiss francs (U.S. $9,200). Normally requires Swiss first degree or equivalent as well as scores from the Graduate Management Admissions Test (GMAT). Most candidates sponsored by business firm or government agency. Program presents comprehensive summary of business and public administration management, using the case method of instruction. Degree: Master of Business Administration, awarded jointly with the Université de Lausanne.

• A 19-wk program for executive development, given twice a yr for middle management executives, age 28-40. Certificate awarded jointly by IMEDE and the Université de Lausanne on completion.

• A 3-wk (summer) Seminar for Senior Executives for top-level management, age, over 40. No certificate granted.

3. Ecole des Hautes Etudes Commerciales of Université de Lausanne, 1015 Lausanne-Dorigny. Considered equivalent to a faculty of the Université de Lausanne. Language of Instruction: French. In 1979-80 the school offered for the first time a 1-yr graduate level course in business administration, open to those with a university first degree and a minimum of 3 yrs of professional experience. The work may be counted towards the doctorate at the Université de Lausanne.

As part of the University, the school has regularly offered undergraduate programs leading to the *licence* and limited doctoral study programs. (See Université de Lausanne description).

Other programs:

1. Centre international d'études monétaires et bancaires (International Center for Monetary and Banking Studies), Avenue de la paix 11a, 1202 Genève. Two or three-day seminars offered. No degrees or certificates awarded.
2. Ecole de Cadres de Lausanne (School of Cadres of Lausanne), Rue de Bugnon 4, 1005 Lausanne. A family-operated school without cantonal or federal recognition or university affiliation. Admission: open to those 21 or older who have any upper secondary leaving certificate. Enrollment: 78% non-Swiss. Tuition for regular course: 18,000 Swiss francs (U.S. $10,800). Faculty: primarily part-time.

The 32-wk program is made up of 8 modules which vary in length from 3 to 7 wks. A *Certificat d'études* ECL (Certificate of Studies at ECL) is given for work completed with an average of 6 out of 10. *Attestation de frequentation* (attestation of attendance) also given to indicate 80% attendance in courses and is required for a student to be eligible for the *Certificat d'études* ECL. Final degree is the *Diplôme ECL, mention Maîtrise en Administration d'Entreprise)* (Diploma from the ECL, specializing in Business Administration). The school also has a short preparatory course in accounting, elementary mathematics, and French which leads to an *Attestation de participation.*

BUSINESS ADMINISTRATION: PLACEMENT RECOMMENDATIONS

1. Certificate from Administration School	May be placed in grade 12.
2. Certificate of Proficiency *(Fähigkeitszeugnis/Certificat de capacité/ Attestato di capacità)*	May be considered for freshman admission where vocational training is considered appropriate preparation.
3. *Handelsdiplom/Diplôme de Commerce/ Diploma Commerciale*	May be considered for freshman admission where commercial secondary education is considered appropriate preparation.
4. *Handelsmaturität/Maturité commerciale/Maturità commercio*	May be considered for freshman admission.
5. *Betriebsökonom* HWV*/*Economiste d'entreprise* ESCEA*/*Economista aziendale* SSQUA*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.

6. University degrees—8 semester programs	May be considered for graduate admission with transfer credit on a course-by-course basis.
7. Master of Business Administration (formerly called *Diplôme en Administration Industrielle)*	May be considered to have a degree comparable to a one-year master's degree in business administration from a U.S. institution.
8. *Diplôme ECL, mention Maîtrise en Administration d'Entreprise*	May be considered on the same basis as students from non-accredited institutions in the USA.
9. Certificates from IMEDE and CEI general management programs	May be considered for graduate transfer credit on a course-by-course basis.

*Records from higher schools of business administration often include an official description referring to the programs as "graduate schools." This is not a correct comparison in the U.S. academic system.

Criminology (See Université de Lausanne, individual description.)

Dramatic Arts ***(Schauspiel/Théatre)***

Vocational upper secondary apprenticeships in three fields of drama (acting, directing, and stage management) lead to a Certificate of Proficiency. There is only one tertiary level dramatic academy:

Schauspiel-Akademie Zürich (Dramatic Arts Academy of Zürich), Winkelwiese 4, 8001 Zürich. At this academy three tertiary level programs are offered:

—Actor/Actress, a 2- to 3-yr program leading to a *Diplom*. Admission: Open to those 17 or older who have completed at least a 2- to 3-yr vocational training period or have a general continuation school diploma.

—Director, a 2- to 3-yr program leading to a *Diplom*. Admission: Open to those 20 or older who have either a Maturity Certificate or a teacher's certificate.

—Theater Teacher, a 2- to 3-yr program leading to *Diplom als Theaterpädagoge* (Diploma as Theater Teacher). Admission: Open to those 20 or older who hold a Maturity Certificate and have had teaching experience, or hold a Primary Teacher's Certificate or a Kindergarten Teacher's Certificate.

Programs in dramatic arts are also offered by two music conservatories (see section on Music in this chapter for more detailed description of the conservatories):

1. Conservatoire de Musique de Genève, Place Neuve, 1204 Genève. The *Diplôme d'art dramatique* (Diploma of Dramatic Art) is granted after completion of 8-semester course of study.
2. Konservatorium für Musik in Bern, Kramgasse 36, 3011 Bern. The *Schauspieldiplom* (Dramatic Art Diploma), an 8-semester program, concentrates on school dramatic art teaching, acting pedagogy, and play therapy. Admission: Open to those not over 25 yrs of age. Upper secondary schooling is desirable, but not required.

DRAMATIC ARTS: PLACEMENT RECOMMENDATIONS

1. Certificate of Proficiency *(Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità)*	a. Completion of 2-yr program: May be placed in grade 10 or 11, based on review of program content.

	b. Completion of 3-yr program: May be considered for freshman admission where vocational training is considered appropriate preparation.
2. a. Actor/Actress *Diplom* b. *Diplôme d'art dramatique* c. *Schauspieldiplom*	Primarily vocational qualifications. Placement should be based upon other credentials.
3. Director *Diplom*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
4. *Diplom als Theaterpädagoge*	May be considered for undergraduate admission with transfer credit on course-by-course basis.

Druggist *(Drogist/Droguiste)*

Druggist refers to a person who manages a store selling general drug products, not a pharmacy dispensing medications. There is one school with federal recognition specializing in training druggists:

Ecole suisse de droguerie (Swiss School of Drugstores), Evole 41, 2000 Neuchâtel. Offers, in addition to upper secondary vocational training, advanced training for students who have completed a 4-yr apprenticeship in a drugstore and have attained a Certificate of Proficiency. Prepares individuals for federal vocational certification as a Master *(Meister/Maitre)* which is required in order to manage a drugstore. Training is 15 months of fulltime study and includes anatomy, arithmetic, botany, business management, chemistry, French, and German. Instruction is in French and German. The program leads to a *Certificat d'études* (Certificate of Studies), issued by the school.

Additional certification is open to students with a minimum of 4 yrs' experience as a druggist who can prepare by part-time coursework for the federal exam to become a certified druggist *(Diplomierter Drogist/droguiste diplômé)*. The exam is regulated by the Swiss Association of Druggists and Droga Helvetica. (See Advanced Vocational Training in this chapter for explanation of vocational levels.)

DRUGGIST: PLACEMENT RECOMMENDATIONS

1. *Certificat d'études*	May be considered for freshman admission.
2. *Meister/Maitre*	May be considered for freshman admission.

Engineering *(Ingenieurwesen/Génie)*

The training of engineers in Switzerland takes place primarily in two types of institutions: the two federal institutes of technology—Ecole Polytechnique Fédérale de Lausanne (EPFL) and Eidgenössische Technische Hochschule Zürich (ETHZ)—and the higher schools of engineering *(Höhere Technische Lehranstalten* (HTL)/*Ecoles Techniques Supérieures* (ETS)/*Scuole Tecnici Superiori* (STS).

The federal institutes of technology are both university-level institutions and, at the same time, professional schools. Admission normally requires a Federal Maturity Certificate or a recognized equivalent, or a special entrance exam. Four yrs of fulltime study leads to the diploma of *Ingenieur (Dipl. Ing. ETH)/Ingénieur (Ing. dipl. EPF)*.

Students complete a 2-year basic cycle in mathematics, physics, and other sciences, and then follow a 2-year period of higher study in the field of specialization. The program ends with examinations on theory, and a thesis. Holders of diplomas from the federal institutes of technology are trained to work independently and to supervise technical engineers.

All the higher schools of engineering, although operated by the cantons, are under federal regulation, and their programs are approved by the Vocational Training Office of the Swiss Confederation. If the initials HTL, ETS, or STS appear on the diploma after the name of the degree, but not necessarily in the institution's name, this indicates a federally approved program.

The higher schools of engineering offer non-university tertiary-level programs designed to teach practical application of engineering. Fifteen offer fulltime study; eight offer evening and Saturday programs only. The calendar year begins in late October and ends in mid-summer. The requirements are basically the same, and the degree received is considered identical. (About 80% of the fulltime students, but only about 20% of the part-time students, complete the program.) Admission is not based on the Federal Maturity Certificate, but rather on a Certificate of Proficiency, received upon completion of an apprenticeship program, or a vocational education school program, which includes 4 yrs of post-compulsory education and practical work, neither necessarily in a standard pre-engineering field. A rigorous entrance exam in math and the sciences is generally required.[10]

The degree programs are 3 yrs of fulltime study or 4½ yrs' part-time. (A few programs require 4 yrs of fulltime study; these are noted under individual descriptions.) In addition to scientific and technical subjects and practical training, programs include courses in chemistry, economics, English, history, law, math, and native language (French, German or Italian). See table 7.

The general examination schedule for fulltime higher school of engineering programs is a *Vordiplomprüfung/propédeutique II* (intermediate exam), usually given at the end of the 4th semester but which may be as early as the 3rd semester or divided into several parts, and a *Diplomprüfung* (diploma exam) at the end of the 6th semester. In part-time programs the *Vordiplomprüfung/propédeutique II* is given at the end of the 4th and 6th semesters in two parts, and the *Diplomprüfung* at the end of the 9th semester.

Table 7. Typical Program in Electrical Engineering at Higher School of Engineering

Subjects	Semesters 1	2	3	4	5	6
General:						
Native Language (French or German)	2	2	2	2	–	–
First Foreign Language (German or French)	4	4	–	–	–	–
English	–	–	2	2	–	–
Economics	2	2	–	–	–	–
Sociology	2	–	–	–	–	–
Applied Psychology	2	–	–	–	–	–

10. In some schools in French-speaking cantons, students may enter the h[illegible] schools of engineering either directly from the 9th grade (Genève) or in the 3rd year of an apprenticeship (Fribourg). The degree obtained is considered equivalent to that of all other higher schools of engineering.

Math, Science & Technical Subjects:						
Mathematics	13	8	8	9	–	–
Programming	1	1	–	–	–	–
Physics (with lab)	5	5	3	3	–	–
Chemistry & Technology (with lab)	7	5	–	–	–	–
Mechanics & Materials Science	–	5	7	–	–	–
Construction Theory	–	3	–	–	–	–
Elements of Machines	–	–	5	6	–	–
Electrotechnic	–	2	5	4	–	–
Electrophysics	2	3	4	3	2	–
Electrical Lab	–	–	3	2	2	–
Electronics	–	–	–	–	4	–
Digital Technique	–	–	–	4	–	–
Regulation & Ordering Technique	–	–	–	–	3	–
Hydraulics & Thermodynamics	–	–	–	2	2	–
*Electrical Machines (incl. lab)	–	–	–	2	10	6
Electrical Installations	–	–	–	–	3	4
High tension technique	–	–	–	–	3	–
*Energy production & distribution	–	–	–	–	2	2
*Computer Science	–	–	1	1	4	3
*Industrial Electronics	–	–	–	–	3	4
*High Frequency & Telecommunications	–	–	–	–	3	5
*Fabrication Technique	–	–	–	–	–	3
hours per week	40	40	40	40	41	27* +12*

Source: Ingenieurschule Biel.

*In addition, the student must take 2 elective subjects chosen from those with asterisks—each for 6 hrs a week; 39 hrs are required.

The grading scale at all higher schools of engineering is shown below. An average of 4 is required to pass to the next semester and for the final degree.

				Suggested U.S. equivalent
6	*ausgezeichnet*	*excellent*	*excellente*	A
5.5	*sehr gut*	*très bien*	*molto bene*	A–
5	*gut*	*bien*	*bene*	B
4.5	*ziemlich gut*	*assez bien*	*abbastanza bene*	B–
4	*genügend*	*suffisant*	*sufficiente*	C
3	*ungenügend*	*insuffisant*	*insufficiente*	D
2	*schwach*	*très faible*	*molto debole*	F
1	*unbrauchbar*	*nul*	*nullo*	F

The degrees granted by all the higher schools of engineering are *Ingenieur* HTL/*Ingénieur* ETS/*Ingegnere* STS, *Architekt* HTL/*Architecte* ETS/*Architetto* STS, and *Chemiker* HTL/*Chimiste* ETS. The engineer's degree was formerly known as *Ingenieur-Techniker*/*Ingénieur-Technicien*/*Ingegnere Tecnica*; the architect's degree was formerly known as *Architekt-Techniker*/*Architecte-Technicien*/*Architetto-Tecnica*. There is no distinction in the academic preparation for the old and new degree programs.

Graduates of higher schools of engineering are training to work as practical engineers under supervision, not as research engineers on their own. The higher schools of engineering are listed, with addresses and selected information, at the end of this section, immediately preceding the placement recommendations.

Comparison of Higher Schools of Engineering Studies and University Engineering Studies

The following admissions and transfer criteria in Switzerland pertain to the federal institutes of technology and the higher schools of engineering.

- The Maturity Certificate is required for admission to a federal institute of technology, but does not qualify a student for admission to the higher schools of engineering unless an additional year of practical training has been completed.
- A Certificate of Proficiency is required for admission to the higher schools of engineering, but is never acceptable for admission to a federal institute of technology.
- A graduate of a higher school of engineering may be admitted to the 3rd year of a federal institute of technology only after completing an additional 1-year special preparatory course and passing the *Vordiplomprüfung/propédeutique II* (intermediate exam) of the federal institute. German-speaking candidates enroll for this additional study at Technikum Winterthur Ingenieurschule HTL. French-speaking candidates attend a preparatory course sponsored by the Ecole Polytechnique Fédérale de Lausanne. Only about 30 higher school of engineering graduates transfer to the federal institutes each year.
- Students who hold a first degree *(Diplom/Diplôme)* from a federal institute of technology may continue into graduate study for the doctorate. Students with the degree of *Ingenieur* HTL/*Ingénieur* ETS would never be admissible to a graduate level program in Switzerland on the basis of that degree alone.

NOTE: Credentials submitted by applicants from higher schools of engineering frequently include a special form letter from the Federal Office for Industry and Labor, or a version of it from an official at a higher school of engineering. (See Document 9.) The conclusions stated in this letter do not agree with the conclusions reached by U.S. specialists in applied comparative education.

SCHWEIZERISCHE EIDGENOSSENSCHAFT
CONFEDERATION SUISSE

BUNDESAMT FÜR INDUSTRIE, GEWERBE UND ARBEIT
OFFICE FEDERAL DE L'INDUSTRIE DES ARTS ET METIERS ET DU TRAVAIL

TO WHOM IT MAY CONCERN

Bachelor's Degree of Swiss Engineering Colleges

The Federal Office for Industry and Labour of Switzerland is a Government authority in charge of supervising the Engineering Colleges (in German: HTL = Höhere Technische Lehranstalt; in French: ETS = Ecole technique supérieure). This Government Body sets the standards and supervises the curricula and the conditions of the graduation examinations, thus ensuring equality among the various institutes.

Upon careful analysis of international academic standards, the Swiss authorities have been assured that the curricula as well as the level of the graduation examinations of the institutes mentioned on the reverse side of this sheet are to be considered as equivalent to the Bachelor of Science Degree. It would be appreciated if this evaluation were taken into consideration by Admission Boards of Universities or by employers, whenever holders of such diplomas apply for studies or employment.

FEDERAL OFFICE FOR INDUSTRY AND LABOUR
The Director:

Berne, August 31st, 1977

(J.F. Bonny)

No. 9. Letter Concerning "Bachelor's Degree of Swiss Engineering Colleges"

BEST COPY AVAILABLE

Private Schools of Engineering

In addition to the federally recognized higher schools of engineering, there are a few private institutions offering similar training but which do not have cantonal or federal recognition. This absence indicates the school has not met the canton's basic standards for recognition. Diplomas from such private institutions will not have any confederation or cantonal headings.

The Higher Schools of Engineering

(*Höhere Technische Lehranstalt* (HTL)/*Ecole Technique Supérieur* (ETS)/*Scuola Tecnica Superiore* (STS)

1. Abendtechnikum Bern HTL: See Ingenieurschule Bern (No. 17).
2. Abendtechnikum Chur HTL, Scalettastrasse 33, 7001 Chur. Part-time evening school. Instruction in German.
3. Abendtechnikum der Innerschweiz, Ingenieurschule HTL, 6048 Horw. Evening school. Instruction in German.
4. Abendtechnikum St. Gallen HTL, Ingenieurschule, Tellstrasse 2, 9001 St. Gallen. Evening school. Instruction in German.
5. Ecole d'Ingénieurs Bienne: See Ingenieurschule Biel (No. 18).
6. Ecole d'Ingénieurs de Fribourg ETS (also known as Technicum Cantonal Fribourg), rue du Musée 4, 1700 Fribourg. Instruction in French. Incorporates several schools, some of which offer trade programs. The Ecole Technique Supérieure division offers the tertiary level engineering program. The affiliated trade schools are the following:
   (a) Ecole des Métiers (School of Trades) offers two programs, one for electricians, mechanics and machine designers, the other for electronic mechanics. Students may apply at end of 9th grade. Apprenticeship contract required. The 4-yr program leads to a Certificate of Proficiency. Students planning to enter the Ecole Technique Supérieure division may begin those studies in the 3rd yr of apprenticeship if they have a grade average of 5.0 and can pass the entrance exam.
   (b) Ecole de Chefs de Chantier (School for Construction Foremen). Admission requires completion of related apprenticeship. The 3-yr program leads to the certificate of the *Diplôme de Chef de Chantier* (Diploma of Construction Foremen), a vocational Master Craftsman federal certificate.
7. Ecole d'Ingénieurs de Genève ETS, 4 rue de la Prairie, 1202 Genève. Operates both fulltime day and part-time evening programs. Students may enter day or evening section at end of compulsory school without further vocational training. Instruction in French. Programs are 4 yrs in the fulltime section, 5 yrs in the part-time section.
8. Ecole d'Ingénieurs Saint-Imier ETS (also known as Technicum Cantonal de St. Imier), rue Baptiste-Savoye 26, 2610 St.-Imier. Instruction in French. The Ecole de Métiers affiliées (Affiliated Trade School) trains students under apprenticeship contracts in electronics and in electrical precision mechanics at the upper secondary level. Certificate of Proficiency awarded on completion.
9. Ecole technique, Couvet. See Ecole technique supérieure du canton de Neuchâtel (No. 12).
10. Ecole technique, Neuchâtel. See Ecole technique supérieure du canton de Neuchâtel (No. 12).
11. Ecole technique supérieure de l'Etat de Vaud, 1, route de Cheseaux, 1401 Yverdon. Instruction in French.
12. Ecole technique supérieure du Canton de Neuchâtel (also known as Ecole d'Ingénieurs du Canton de Neuchâtel), avenue du Technicum 26, 2400 Le Locle. Instruction in French. The school, which also offers a 2-yr secondary preparatory

course for all programs, is divided into 4 branches: Ecole technique, rue de 1er Mars 9, 2108, Couvet; Ecole technique, rue Jaquet-Droz 7, 2000 Neuchâtel; Technicum neuchâtelois, division de La Chaux-de-Fonds, rue du Progrès 38-40, 2300 La Chaux-de-Fonds; Technicum neuchâtelois, division du Locle, avenue du Technicum 26, 2400 Le Locle.

13. Ecole technique supérieure du soir Lausanne (ETS) (also known as the Ecole d'ingénieurs), 12 rue de la Vigie, 1003 Lausanne. Part-time evening school. Instruction in French.
14. Ecole technique supérieure de l'industrie graphique (ETS), 63 rue de Genève, 1004 Lausanne. Officially bilingual: French & German. This program is described under the section on art in this chapter.
15. Höhere Technische Lehranstalt Brugg-Windisch (also known as Ingenieurschule), 5200 Windisch. Instruction in German.
16. Ingenieurschule beider Basel (HTL) (also known as Technikum beider Basel), Gründenstrasse 40, 4132 Muttenz. Instruction in German.
17. Ingenieurschule Bern HTL (Abendtechnikum), Morgartenstrasse 2, 3014 Bern. Part-time evening school. Instruction in German.
18. Ingenieurschule Biel HTL or Kantonales Technikum Biel: Höhere Technische Lehranstalt des staates Bern (HTL) (also known as Ecole d'Ingénieurs Bienne/Technicum cantonal Bienne), Quellgasse 21, Biel. Officially bilingual: French & German. Affiliated trade schools:
    (a) Kantonale Technikerschule/4-semester machinist program leading to *Techniker* TS; (b) Kantonale Schule für mikromechanische Berufe/8-semester microtechnician training program; (c) Kantonale Schule für Gestaltung/cantonal art vocational school. (See section on art in this chapter.)
19. Ingenieurschule Burgdorf (HTL) (also known as Kantonales Technikum Burgdorf), Pestalozzistrasse 20, 3400 Burgdorf. Instruction in German. In addition to standard higher school of engineering programs, this school is planning a 1-yr post-Ingenieur HTL program to train generalists in management. The 12-month course of study can be taken in parts over a 3-yr period, and will lead to a certificate.
20. Ingenieurschule Grenchen-Solothurn HTL, Wiesenstrasse 12, 2540 Grenchen. Part-time evening school. Instruction in German.
21. Ingenieurschule Zürich HTL (Abend-Technikum), Lagerstrasse 45, 8004 Zürich. Part-time evening school. Instruction in German.
22. Interkantonales Technikum Rapperswil (also known as Ingenieurschule), Oberseestrasse 10, 8640 Rapperswil. Instruction in German. Programs require the standard 3 yrs with the exception of the 4-yr program in urban engineering.
23. Interstaatliche Ingenieurschule: See Neu-Technikum Buchs. (No. 26).
24. Kantonales Technikum Biel: See Ingenieurschule Biel. (No. 18).
25. Kantonales Technikum Burgdorf: See Ingenieurschule Burgdorf. (No. 19).
26. Neu-Technikum Buchs. Interstaatliche Ingenieurschule, 9470 Buchs. Instruction in German. Financed by the Swiss Confederation, the cantons of St. Gallen and Graubünden, the principality of Liechtenstein, and the state of Vorarlberg in Austria. In addition to regular 3-yr program, there are also 4-yr programs in biomedical engineering and systems engineering leading to the *Fachingenieur* NTB. The *Ingenieur* HTL is prerequisite to the *Fachingenieur* NTB.
27. Scuola Tecnica Superiore del Cantone Ticino (STS), Lugano-Trevano, 6932 Canobbio. Instruction in Italian. Attached secondary vocational school.
28. Technicum cantonal Bienne: See Ingenieurschule Biel HTL. (No. 18).
29. Technicum cantonal Freiburg: See Ecole d'Ingénieurs de Fribourg. (No. 6).
30. Technicum cantonal de Saint-Imier: See Ecole d'Ingénieurs Saint-Imier, (No. 8).

31. Technicum neuchâtelois, division du Locle: See Ecole technique supérieure du Canton de Neuchâtel, (No. 12).
32. Technicum neuchâtelois, division de La Chaux-de-Fonds: See Ecole technique supérieure du Canton de Neuchâtel, (No. 12).
33. Technikum beider Basel: See Ingenieurschule beider Basel, (No. 16).
34. Technikum Winterthur (also known as Ingenieurschule HTL), 8401 Winterthur. Instruction in German. One of the oldest and most highly respected of the higher schools of engineering. In addition to the standard 3-yr program, there is a 1-yr post-degree program which prepares German-speaking students to transfer to the federal institutes of technology at the post-*Vordiplomprüfung* level.
35. Zentralschweizerisches Technikum Luzern HTL (also known as Ingenieurschule), Technikumstrasse 6, 6048 Horw. Instruction in German.

ENGINEERING: PLACEMENT RECOMMENDATIONS

1. *Architecte* ETS/*Architekt* HTL/ *Architetto* STS* *Chimiste* ETS/*Chemiker* HTL† *Ingénieur* ETS/*Ingenieur* HTL/ *Ingegnere* STS‡	May be considered for undergraduate admission with transfer credit on course-by-course basis.
2. *Fachingenieur* NTB *(Buchs)*	May be considered for graduate admission.
3. *Ingenieur* ETH/*Ingénieur* EPF	May be considered to have a degree comparable to a master's degree in engineering from a U.S. institution.
4. *Diplôme de Chef de Chantier*	Primarily a vocational qualification. Placement should be based on other, academic credentials.

*Previously called *Architecte-technicien/Architekt-Techniker/Architetto-Tecnica.*
†Previously called *Chimiste-technicien/Chemiker-Techniker.*
‡Previously called *Ingénieur-technicien/Ingenieur-Techniker/Ingegnere-Tecnica.*

Forestry

The Eidgenössische Technische Hochschule Zürich (ETH) offers the only university-level training in forestry. A 4-year program leads to the degree of *Forstingenieur* (Forestry Engineer). After one year of experience beyond the degree, a Federal Eligibility Certificate *(Eidgenössisches Wählbarkeitszeugnis)* can be obtained.

There are two intercantonal higher vocational schools of forestry: Interkantonale Försterschule in Lyss (IFL) and Interkantonale Försterschule Maienfeld (IFM). Admission is open to those between the ages of 20 and 40 who hold a Certificate of Proficiency as *Forstwart* (Forest-keeper) (a 3-yr program at the secondary level) and have had 2 yrs of experience in that vocation. Applicants must take an entrance exam which requires 2-3 days, and includes both practical and theoretical parts. In addition to forestry-related subjects, the exam covers native language, arithmetic, and geometry.

The programs at the intercantonal forestry schools require one year (April 1 to mid-March) and lead to the federal Diploma as a Forester *(Eidgenössisches Diplom als Förster).* The curriculum primarily relates to forestry.

FORESTRY: PLACEMENT RECOMMENDATIONS

1. Certificate of Proficiency (*Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità*) as *Forstwart*	May be considered for freshman admission where vocational training is considered appropriate preparation.
2. *Eidgenössisches Diplom als Förster*	May be considered for freshman admission where vocational training is considered appropriate preparation.
3. *Forstingenieur* (ETH)	May be considered for graduate admission with transfer credit on a course-by-course basis.
4. *Eidgenössisches Wählbarkeitszeugnis*	Represents professional experience, not an academic qualification.

Hotel Administration *(Hotelfach/Hôtellerie)*

Switzerland is internationally known for schools which train students for positions in hotels and restaurants. Study programs vary in length from one-year apprentice programs to full 30-month professional training programs. Admission requirements also vary, from completion of compulsory schooling to a Federal Maturity Certificate.

There are two general types of hotel schools: One type (all upper secondary vocational schools) trains hotel staff exclusively, not management. The other type (hotel administration schools) train hotel administrators at the management level. Only the latter are described below.

The grading scale in all programs is on a 6-1 scale with 6 the highest grade, and 4 the passing grade.

1. Centre International de Glion/Internationales Zentrum für Hotellerie und Fremdenverkehr (International Center of Glion), Glion-sur-Montreux, 1823 Switzerland. Est 1960s by the Société d'Expansion touristique (Society for the Expansion of Tourism), with which a close affiliation is still maintained. The diploma has cantonal recognition. The private school receives no cantonal or federal funding. Language of instruction: French. Some instruction in English in the 4th and 5th semesters of the *cycle long* (long cycle). Enrollment: 250 (5% Swiss nationals). Programs offered: Hotel administration, hospital administration, and tourism *(administration hôtelière, hospitalière et tourisme)*.

   • The *cycle long* (long cycle)—27-month training program. First 2 semesters (Oct.-June) have a common curriculum for all three specializations, followed by an obligatory 3-month period (July-Sept.) of practical training. The 2nd year coursework (Oct.-June) is divided into two tracks, one preparing for hotel and hospital administration, the other for tourism. A 3-month practical training period (July-Sept.) again follows. The final 3 months (Oct.-Dec.) includes further specialized instruction in commerce, finance, and hospital/restaurant management. The degree granted is the *Diplôme du Centre International de Glion* (Diploma of the International Center of Glion).

   Admission is open to those 19-30 yrs of age who hold a cantonal *Baccalauréat* from a French-speaking canton or a Federal Maturity Certificate or the equivalent and who have knowledge of English equivalent to 2 yrs of study at the secondary level.

   • The *cycle court* (short cycle)—15-month program in the same fields as the *cycle long*. Includes 9 months of study at Glion and two successive 3-month internships, first in administration and then in kitchen work. The *Certificat d'études du Centre International de Glion* (Certificate of Studies of the Center) is granted on completion. Admission requires only completion of the compulsory education period.

2. Ecole hôtelière Lausanne/Hotelfachschule Lausanne (Lausanne Hotel School), le Chalet-à-Gobet, 1000 Lausanne 25. Est 1893 by the Société suisse des hôteliers (Swiss Hotelkeepers Association). First school in the world to offer hotel training. Has federal and cantonal recognition. Receives substantial support from the Swiss Confederation. Its aim is to prepare hotel managers with wide theoretical knowledge and substantial practical experience at every level of hotel operation. Language of instruction: French. Enrollment: 405 (Enrollment must be at least 51% Swiss to retain eligibility for federal funds.)

Admission: Applicants must be 18-25 yrs of age and have one of the following: Maturity Certificate, Cantonal *Baccalauréat*, diploma from a federally recognized commercial school or private commercial school recognized by the Federation of Swiss Private Schools, Certificate of Proficiency as a commercial employee, a cook, or a wine steward, or foreign credentials equivalent to any of the above. (U.S. applicants must have 2 years of undergraduate study beyond the high school diploma.)

Certificates & Diplomas: A certificate is awarded for each course completed. The final diploma is the *Höheres Hotelfachdiplom/Diplôme d'études hôtelières supérieures* (Diploma of Higher Hotel Studies).

Programs of study:

• Higher hotel studies *(Etudes hôtelières supérieures)*. A 3½-yr program consisting of the following courses:[11]

Course 1. Production (culinary and kitchen training). Five months' theoretical study, immediately followed by 5 months' practical training. Theoretical work includes knowledge of food products and related regulatory laws, food hygiene and basic food chemistry, food costing, etc., languages (French, German, English), and commercial arithmetic.

Course 2. Sales. Five months' instruction, followed by 5 months of related work. Instruction offered in knowledge and service of wines, spirits and beverages, wine tasting, sales psychology and techniques.

Course 3. Hotel operations. Five months' theoretical instruction and the third compulsory 5-month period of practical training. Subjects include hotel operation techniques, accounting, technical installations, law, and hotel correspondence in three languages.

Course 4. Management and administration. Final 5-month segment includes general hotel organization, staff management, financial analysis and accounting, statistics, tourism, economics and marketing, and data processing.

• Assistant Manageresses' Program *(Programme d'assistante de direction)*. A 20-month program for domestic service in a hotel. Admission: Open to women between 18 and 25 who have completed the 9 yrs of compulsory schooling. No prior experience in the field required. Students entering with a Certificate of Proficiency as a hotel assistant are exempt from the first 10 months of the program. All programs lead to a Certificate of Proficiency.

The program is divided into two sections: (1) Hotel housekeeper training: 5 months' theoretical work and practical training at the school, followed by 5 months' practical training in a hotel. (2) Hotel operations (a second 10 months of training); 5 months' theoretical instruction (same program as Course 3 of the Higher Hotel Studies program) and 5 months' practical work.

The degree is *Diplôme d'assistante de direction/Direktionsassistentin* (Diploma of Assistant Manageress). Additional 5 months of coursework in management and administration also offered. Those who complete this extra work may then undertake the first part of Higher Hotel Studies in a further 10-month period and will thus have completed all work for the Diploma of Higher Hotel Studies.

11. Students entering the program with a Certificate of Proficiency as a commercial employee *Kaufmännischer Angestellter/Employé de commerce/Impiegato di commercio)* are exempt from Course 3, those with a certificate as Cook *(Koch/Cuisinier/Cuoco)* from Course 1, and those with a certificate as Wine Steward *(Kellner/Sommelier/Cameriere)* from Course 2.

HOTEL ADMINISTRATION: PLACEMENT RECOMMENDATIONS

1. Certificate of Proficiency *(Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità)*	a. Completion of 2-yr program: May be placed in grade 10 or 11, based on review of program content. b. Completion of 3-yr program: May be considered for freshman admission where vocational training is considered appropriate preparation.
2. *Direktionsassistentin/Diplôme d'assistante de direction*	Primarily a secondary level vocational qualification.
3. *Certificat d'études du Centre International de Glion*	Primarily a vocational qualification. Admission should be based on other credentials.
4. *Diplôme du Centre International de Glion* *Höheres Hotelfachdiplom/Diplôme d'études hotelières supérieures*	May be considered for undergraduate admission with up to 2 yrs' transfer credit on a course-by-course basis.

Journalism *(Journalisten/Journalisme)*

Limited opportunity for the study of journalism exists. Université de Fribourg is the only university offering specific training in this field through its Institut für Journalistik und Kommunkationswissenschaft/Institut de journalisme et des communications sociales. This institute has a 4-semester graduate program leading to a *Diplom in Journalistik/Diplôme en Journalisme*. A first university degree is required for entrance. Students without a first degree, but with substantial practical experience in the field, are occasionally admitted, and on completion of the same program receive a certificate instead of the diploma.

The only other formal program in journalism is offered by the Ringier Journalisten-Schule, located at Römerhalde, 4800 Zofingen. This school is operated by Ringier & Co. and offers an 18-month program: 20 wks of academic training and 52 wks as a trainee in the company's various editorial offices which publish weekly and daily newspapers. The school awards a diploma based on successful completion of studies and a report which is suitable for publication. (The diploma does not have cantonal or federal recognition). Admission to the program requires the Maturity Certificate or a general education continuation school diploma.

JOURNALISM: PLACEMENT RECOMMENDATIONS

1. *Diplom in Journalistik/Diplôme en Journalisme* (Fribourg) *Zeugnis/Certificat* (Fribourg)	May be considered to hold a degree comparable to a master's in Journalism from a U.S. institution.
2. *Diplom* (Ringier Journalisten-Schule)	May be considered to have completed advanced vocational training. Not an academic qualification.

Language Studies

In all Swiss universities there are standard 4-yr degree programs in language studies. In addition there are special seminars affiliated with universities and many private

institutes which exist only to teach languages. The private institutes may or may not have cantonal recognition. The courses at both the universities and the institutes may vary from short summer courses to full-year programs. They are usually open to anyone 17 or older. (See the University Individual Descriptions for complete description of university and university-affiliated institute language programs.)

LANGUAGE STUDIES: PLACEMENT RECOMMENDATIONS

1. University certificates and diplomas issued on completion of one to four-semester language programs	May be considered for undergraduate credit in foreign language determined by examination or syllabus review.
2. Certificates from private institute without university affiliation	Credit and/or placement should be determined in accordance with the receiving institution's policies concerning work completed at a non-university language school.

Law (*Jurisprudenz* or *Rechtsanwalt/Droit*) and Notary (*Notar/Notaire*)

Programs in law are offered by all seven cantonal universities and by the Hochschule St. Gallen. Law programs require 8 semesters in the German-speaking universities (Basel, Bern, St. Gallen, Zürich) and 7 in the bilingual university at Fribourg. The standard admissions credentials of each university apply. (See individual descriptions in this chapter). The degree awarded is *Licentiatus iuris* (Licentiate in Law). Universität Bern has a second degree program in law which requires 7 semesters, plus at least 18 months' practical experience in a Bern legal office, which leads to the *Bernisches Fürsprecherpatent* (Bern Lawyer's Certificate). Graduates are permitted to practice in the canton of Bern. It is considered a very difficult and prestigious degree.

The French-speaking universities (Genève, Lausanne and Neuchâtel) offer a 6-semester program leading to the *Licence en droit* or the *Licentiatus iuris*. Students at Lausanne who complete a thesis during the 6 semesters qualify for the *Doctorat en droit, mention "sciences juridiques"* (Doctorate in Law, specializing in legal studies). The study for the *Licence en droit* and the *Doctorat en droit* is identical; the addition of a thesis is the only distinction. The Université de Genève offers an additional year of specialized study beyond the *Licence en droit* leading to the *Diplôme d'études supérieures en Droit* (Diploma of Higher Studies in Law) in one of three areas: Private Law, Public Law, or History of Law and Roman Law.

At all universities, 1-3 years of study beyond the licentiate leads to the advanced degree of *Doctor iuris*, also referred to as the *Doctorat en droit*. (Care must be taken to distinguish this degree from the Université de Lausanne's *Doctorat en droit* which is only the first degree.

At Universität Zürich, however, the *Licentiatus iuris* is not a prerequisite to doctoral study in law. Students are admitted with standard University admission credentials and may bypass the first degree, completing the *Doctor iuris* in a minimum of 5 yrs.

To be admitted to practice in Switzerland requires 2 yrs of internship beyond the licentiate and the passing of a bar examination. Certified lawyers hold the *Fähigkeitszeugnis für den Rechtsanwaltberuf/Brevet d'avocat* (Certificate of Lawyer).

Students wishing to become notaries also study in the faculties of law. Cantonal regulations for the notary certificate vary. In Genève a *Licence en droit* plus 4 yrs of practical experience is required before the Notary *(Notaire)* examination may be taken. In Neuchâtel the *Licence en droit* plus 2 yrs of practical experience is required before

the exam. In Lausanne the holder of a *Licence en droit* plus a thesis or the *Doctorat en droit* without an additional thesis may take the exams for the notary certificate after 3 yrs of practical experience. In Bern, a student who has completed a minimum of 5 semesters of study at the Universität Bern may take the notary examination and receive the *Berner Notariatspatent* (Bern Notary Certificate).

LAW: PLACEMENT RECOMMENDATIONS

1. *Bernisches Fürsprecherpatent*	May be considered for graduate admission.
2. *Licentiatus iuris* (from Basel, Bern, St. Gallen, Zürich)	May be considered for graduate admission with graduate transfer credit on a course-by-course basis.
3. *Licence en Droit* or *Licentiatus iuris* (from Genève, Lausanne, Neuchâtel)	May be considered for graduate admission. Depending upon the relevance of the *Licence* major to the graduate program, some undergraduate deficiencies may have to be made up.
4. *Doctorat en droit, mention "sciences juridiques"* (Lausanne)	May be considered for graduate admission. Depending upon the relevance of the *Licence* major to the graduate program, some undergraduate deficiencies may have to be made up.
5. *Diplôme d'études supérieures en Droit* (DES) (Genève)	May be considered for graduate admission with graduate transfer credit on a course-by-course basis.
6. *Doctor iuris/Doctorat en droit*	May be considered for graduate admission with graduate transfer credit on a course-by-course basis.
7. *Fähigkeitszeugnis für den Rechtsanwaltberuf/Brevet d'avocat*	May be considered to have professional status in Switzerland comparable to that of being admitted to the bar in the USA.

NOTARY: PLACEMENT RECOMMENDATIONS

1. *Berner Notariatspatent* (Bern)	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
2. Other cantonal notary certificates	May be considered to have a professional certificate. Not an academic qualification.

Library Science *(Bibliothekare/Bibliothécaires)*

Most training for library work is done in vocational secondary apprenticeship programs of 3-4 yrs' length. The student may then take the exam for a Certificate of Proficiency in the field. There is one tertiary level school of library science: Ecole de Bibliothécaires (School for Librarians), affiliated with the Institut d'Etudes Sociales. Address: 28, rue Prévost-Martin, 1211 Genève 4. It offers a 3-yr program of study leading to a *Diplôme*. Admission requires the Maturity Certificate or a cantonal *Baccalauréat*. The program includes 4 semesters of coursework concentrating exclusively on aspects of library science, one yr of practical training, and a final 4-month period of preparation of research work on a bibliographical subject, e.g., cataloguing, classification for a small library.

LIBRARY SCIENCE: PLACEMENT RECOMMENDATIONS

1. Certificate of Proficiency *(Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità)*	May be considered for freshman admission where vocational training is considered appropriate preparation.
2. *Diplôme*, Ecole de Bibliothécaires	May be considered for undergraduate admission with up to 2 yrs' transfer credit on a course-by-course basis.

Military Science (See Universität Zürich, individual description.)

Music *(Musik/Musique)*

There are over 300 music schools in the country. Many offer training primarily for amateur musician. The institutions listed below are recognized by the Schweizer Musikrat (Swiss Music Council) and provide training for musicians and music teachers.[12]

Music programs affiliated with universities have the same entrance examination as other university departments in the same faculty. (See individual university listings). Requirements for admission to other programs vary, and many require only completion of compulsory schooling and thus are the equivalent of fulltime upper secondary vocational school. All professional programs require an entrance exam and an audition.

There are two types of diplomas for music teachers: The *Lehrdiplom/Diplôme d'enseignement* (Teacher's Diploma) indicates certification as a professional music teacher. The *Musiklehrerdiplom/Brevet* or *Diplôme d'enseignement secondaire* (Music Teacher's Diploma) indicates certification for teaching music in elementary and secondary schools.

Schools Offering Professional Training

1. Akademie für Schul- und Kirchenmusik Luzern (Academy for School and Church Music of Luzern), Obergrundstrasse 13, 6003 Luzern. Roman Catholic academy for school and church music. Est 1942. Receives confederation and church support.
   Degrees Awarded: *Diplom A*—professional training for fulltime organists and choirmasters (requires Maturity Certificate, kindergarten teacher credential, teacher certificate, or vocational certificate for entry); *Diplom B*—3-yr program of professional training for part-time organists and choirmasters; *Fähigkeitsausweis als Lehrkraft für musikalische Früherziehung und Grundschulung*, 2-3 semester program leading to professional certificate for teaching music for young children and in lower primary basic schools; *Schulmusikdiplom I* (School Music Diploma I), 6-semester program leading to teacher's diploma for primary school music education; *Schulmusikdiplom II*, 2-4 semester program leading to teacher's diploma for lower secondary music education.
2. Conservatoire cantonal de Musique à Sion (Cantonal Music Conservatory of Sion), rue de la Dixence, 1950 Sion. Est 1949. Offers professional courses leading to the following: *Diplôme de capacité* (Diploma of Proficiency); *Diplôme de virtuosité* (Diploma of Virtuosity); *Licence de concert* (Licentiate of Concert).
3. Conservatoire de Bienne/Konservatorium Biel (Conservatory of Bienne), Ring 12, 2502 Bienne. Est 1931. Officially bilingual: French & German. Offers professional

12. *Etudes Musicales professionnelles en Suisse/Musikalische Berufsstudien in der Schweiz, Schweizer Musikrat*, Postfach 2054, 4001 Basel, Switzerland, 1977. This book gives (in French, German, English and Spanish) details of professional music studies.

courses leading to *Diplôme d'enseignement* (Teacher's Diploma), 8 semesters; *Licence d'enseignement de la rythmique* (Licentiate in Teaching Rhythmics), 8 semesters, including 1 yr at the Institut Jaques-Dalcroze (see No. 12 below); *Diplôme de virtuosité* (Diploma of Virtuosity), 7 semesters.

4. Conservatoire de Fribourg/Konservatorium für Musik (Conservatory of Fribourg), rue Pierre-Aeby 22Ba, 1700 Fribourg. Est 1904. Instruction in French and German. Offers professional courses leading to the following: *Lehrdiplom/Diplôme d'enseignement* (Teacher's Diploma); *Lehrdiplom für theoretische Fächer/Diplôme d'enseignement des branches théoriques* (Teacher's Diploma for theoretical branches); *Lehrdiplom für Musik und Gesang in den Sekundarschulen/Diplôme d'enseignement de la musique et du chant dans les écoles secondaires* (Diploma for teaching music and singing in secondary schools); *Solistendiplom/Diplôme de virtuosité* (Diploma of Virtuosity). All work for the teaching diploma is done in collaboration with the local teacher training institute.

5. Conservatoire de Musique de Genève (Conservatory of Music of Geneva), Place Neuve, 1204 Genève. Est 1835; oldest conservatory in Switzerland. Professional programs lead to the following degrees: *Diplôme d'art dramatique* (Dramatic Arts); *Diplôme de direction chorale* (Choral Conducting); *Diplôme de direction d'orchestre* (Orchestra Conducting); *Diplôme d'enseignement* (Teaching Diploma); *Diplôme d'études supérieures* (Higher Studies), granted for advanced studies on any instrument or in vocal training; *Diplôme de maître de musique* (Music Teacher's Diploma); *Diplôme de virtuosité* (Virtuosity); *Diplôme pédagogique d'initiation musicale* (Teaching Introductory Music). These degrees all require 8-10 semesters. An additional 4-8 semesters lead to a *Prix de virtuosité* (Prize in Virtuosity). The Conservatory also gives a certificate and prize in classical dance and ballet.

6. Conservatoire de Musique de La Chaux-de-Fonds et du Locle (Conservatory of Music of La Chaux-de-Fonds and Le Locle). Two locations: (1) rue Léopold Robert 34, 2300 La Chaux-de-Fonds; (2) rue Marie-Anne Calame 5, Le Locle. Est 1927. Offers the following degrees: *Certificat* (given at the end of the first non-professional course); *Diplôme de capacité professionnelle* (8 semesters); *Diplôme de capacité pédagogique* (8 semesters); *Prix de virtuosité* (given on completion of virtuoso program); *Diplôme supérieur d'exécution* (given on completion of part of the advanced virtuoso program).

7. Conservatoire de Musique de Lausanne (Conservatory of Music of Lausanne), rue du Midi 6-9, 1003 Lausanne. Est 1881. Programs leading to the following degrees are offered: *Brevet de maître de musique* (Credential of Music Teachers in lower secondary schools); *Certificat professionnel des classes de sonates* (Professional Certificate of Sonata Classes); *Diplôme de direction chorale, fanfare et harmonie* (Choir Directing, Fanfare and Harmony); *Diplôme d'enseignement* (Teacher's Diploma); *Diplôme des branches théoriques* (Theoretical Branches); *Diplôme de virtuosité* (Virtuosity); *Diplôme d'art dramatique* (Dramatic Art); *Licence de Concert* (Licentiate of Concert). The teaching diplomas require from 6 to 10 semesters. The prize in virtuosity is awarded after 2-4 additional semesters.

8. Conservatoire de Musique de Neuchâtel (Conservatory of Music of Neuchâtel), Faubourg Hôpital 106, 2000 Neuchâtel. Est 1917. Offers same degrees as Conservatory No. 7.

9. Evangelisches Kirchenmusikseminar des Kantons St. Gallen (Evangelical Church Music Seminar of St. Gallen Canton), Stauffacherstrasse 4, 9000 St. Gallen. Est 1972 by Protestant Church of canton of St. Gallen. Offers specialized courses for organists and choir conductors in all subjects concerning liturgy and church music. The only certificate offered is the *Kantonaler Ausweis für Organisten und Chorleiter* (Cantonal Certificate for Organist and Choir Director), which requires a minimum of 3-semesters' study.

10. Institut de Musicologie de l'Université de Fribourg/Musikwissenschaftliches Institut der Universität Freiburg (Institute of Musicology of the University of Fri-

bourg). Affiliated with the Université de Fribourg. Instruction in both French and German. Offers the following degrees: *Licentiat/Licence*, 8 semesters; *Sekundarlehrerdiplom/Diplôme d'enseignement secondaire* (Secondary School Teacher's Diploma), 5 semesters (qualifies for teaching grades 5-9); *Gymnasiallehrerdiplom/Diplôme de maître de gymnase* (Gymnasium Teacher's Diploma), 8 semesters (qualifies for teaching grades 10-13).

Prospective teachers may study music in the Institute either as a primary or secondary subject. The doctorate may also be obtained. All degrees are conferred by the Université de Fribourg.

11. Institut für Kirchenmusik der evangelisch-reformierten Landeskirche des Kantons Zürich (Institute for Church Music of the Evangelical Reformed Church of the canton of Zürich), Hirschengraben 7, 8001 Zürich. Est 1962 by the Protestant Church of the canton. There are two sections in Choir Conducting: 2-semester program leads to *Diplom A*, 3-semester program to *Diplom B*. *Diplom B* is the more technical program and is an official cantonal certificate.

12. Institut Jaques-Dalcroze (Jaques-Dalcroze Institute), 4 rue de la Terrassière, 1207 Genève. Est 1915 by Jaques Dalcroze, who developed a new method of musical-rhythmic instruction. Three degrees are granted: *Certificat élémentaire de la Méthode Jaques-Dalcroze pour les jardins d'enfants* (Elementary Certificate of the Jaques-Dalcroze Method for kindergarten instruction), 2 semesters (program open to certified kindergarten and primary school teachers); *Licence d'enseignement de la Méthode Jaques-Dalcroze* (Licentiate of Teaching the Jaques-Dalcroze Method), 8 semesters; *Diplôme d'enseignement de la Méthode Jaques-Dalcroze*, 2 semesters beyond the *Licence*; *Diplôme de thérapie psychomotrice* (Motivational Psychology Therapy), 2 semesters beyond the *Licence*. The *Licence* and *Diplôme* have cantonal recognition.

Admission to all programs is open to those at least 18 years old who have a Maturity Certificate or equivalent diploma. The Institute accepts for admission in special circumstances the *Diplôme de culture générale* from the canton of Genève. Students who have completed the 3rd year (12 yrs of schooling) in the Collège de Genève may also be admitted.

13. Konservatorium Biel. See Conservatoire de Bienne.

14. Konservatorium für Musik in Bern (Conservatory for Music in Bern), Kramgasse 36, 3011 Bern. Est 1858. Offers the following professional degrees: *Chordirigentendiplom* (Choir Leader's Diploma), *Höherer Studienausweis* (Higher Studies Certificate), 12 semesters (requires *Lehrerorchester* or *Organistendiplom* with average of 5); *Lehrdiplom* (Teacher's Diploma), 9 semesters; *Orchesterdiplom* (Orchestra Diploma), 9 semesters (there are two subjects, one leading to a degree in orchestra playing, the other to a degree in orchestra conducting); *Organistendiplom* (Organist Diploma), 9 semesters; *Schauspieldiplom* (Dramatic Art Diploma), 8 semesters; *Solistendiplom* (Soloist Diploma), 12 semesters.

The grading scale, with suggested U.S. equivalent, is as follows: 6 (*sehr gut*) = A; 5 (*gut*) = B; 4 (*genügend*) = C; 3 (*ungenügend*) = D; 2 (*schlecht*) = F; 1 (*sehr schlecht*) = F. An average of 4 is required for a pass.

15. Konservatorium Luzern (Conservatory of Luzern), Dreilindenstrasse 93, 6006 Luzern. Est 1942. The following degrees, all of which take 8 semesters, are offered: *Lehrdiplom* (Teacher's Diploma); *Meisterkursdiplom* (Master Course Diploma); *Solistendiplom* (Soloist Diploma).

16. Konservatorium und Musikhochschule Zürich (Conservatory and Music Academy of Zürich), Florhofgasse 6 and Florastrasse 52, 8001 Zürich. Conservatory est 1876, music academy 1901. The two institutions are now combined and offer the following degrees: *Blasmusikdiplom* (Harmony Diploma); *Chorleiterdiplom* (Choir Director's Diploma); *Lehrdiplom* (Teacher's Diploma); *Orchesterdiplom* (Orchestra Diploma); *Reifeprüfung* and *Solistendiplom* (vocational test and Soloist Diploma); *Rhythmikdiplom* (Rhythmic Diploma); *Schulmusikdiplom* (School Music Diploma); *Theorielehrerdiplom* (Theory Teacher's Diploma).

17. Musik-Akademie der Stadt Basel (Music Academy of the City of Basel), Leonhardstrasse 4-6, 4051 Basel. The Academy has three sections: the Konservatorium, est 1905; the Orchesterschule, est 1931; and the Schola Cantorum Basiliensis, est 1933. Programs leading to the following degrees are offered. An asterisk marks courses offered by the Schola Cantorum Basiliensis.
Blasmusikdirigent (Harmony Director), 4-8 semesters; **Blockflöten Lehrdiplom* (Recorder Teacher Diploma), 6 semesters; *Blockflöten Lehr- und Grundkurs-Diplom* (Recorder Teacher and Basic Course Diploma), 8 semesters; *Chorleiter* (Choirmaster), 4-8 semesters; **Diplom für alte Musik* (Ancient Music), 8 semesters; **Diplom für Musik des Mittelalters und der Renaissance* (Medieval and Renaissance Music), 6 semesters; *Diplom als Theorielehrer* (Theory Teacher), 8 semesters; *Kapellmeister* (Conductor's Diploma), 4-8 semesters; *Lehrdiplom* (Teacher's Diploma), 8 semesters; *Musiklehrer an Mittel- bzw. Oberschulen* (Music Teacher for lower and upper secondary schools), 8 semesters; *Orchesterdiplom* (Orchestra diploma), 4-8 semesters; *Solistendiplom* (Soloist Diploma), 4-8 semesters. The 4-8 semester programs vary in length depending upon the skills.
18. Musikschule und Konservatorium Winterthur (Music School and Conservatory of Winterthur), Schwalmenackerstrasse 25, 8400 Winterthur. Est 1873. Offers the following degrees: *Lehrdiplom* (Teacher's Diploma), 8 semesters; *Reifeprüfung* (proficiency examination), 6-9 semesters; *Solistendiplom* (Soloist Diploma).
19. Musikwissenschaftliches Institut der Universität Basel (Institute of Musicology of the University of Basel), Petersgraben 27, Basel. Est 1912. Studies emphasize ethnomusicology, particularly in areas of medieval and oriental music. The programs (8 semesters), lead to the *Lizentiat*. Further study for a doctorate is offered. Also offers musicology as a minor subject for teacher certification for upper secondary schools.
20. Musikwissenschaftliches Institut der Universität Freiburg. See Institut de Musicologie de l'Université de Fribourg.
21. Musikwissenschaftliches Seminar der Universität Zürich (Music Knowledge Seminar of the University of Zürich), Florhofgasse 8, 8001 Zürich. This institute is a section of the Universitat Zürich. The first university degree of *Lizentiat*, 8 semesters, and the *Doktorat*, after additional study, are offered.
22. Schola Cantorum Basiliensis. See Musik-Akademie der Stadt Basel (No. 17).
23. Schweizerischer Musikpädagogischer Verband/Société Suisse de Pédagogie Musicale (Swiss Music Teacher's Organization), Franz Langweg 16, 4500 Solothurn. Professional organization of certified music teachers. Final exams lead to the *Lehrdiplom/Diplôme d'enseignement* (Teacher's Diploma) in all instruments, singing, music theory, and school music teaching; and to the *Konzertdiplom/Diplôme de concertiste* or *Solistendiplom/Diplôme de Soliste* (Concert Diploma or Soloist Diploma).
24. Swiss Jazz School, Eigerplatz 5a, 3002 Bern. The only institution of its kind in Europe. The professional section offers an 8-semester course of preparation for a professional jazz career. The course has cantonal recognition.

MUSIC: PLACEMENT RECOMMENDATIONS

1. Certificate of Proficiency *(Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità)* or secondary level diploma in musical field	May be considered for freshman admission.
2. Other music credentials not from university programs.	May be considered for admission and placement in accordance with policies used for students from U.S. schools of music.

3. Music degrees from university programs	
a. Six-semester degrees	May be considered for graduate admission. Depending upon the relevance of the first degree major to the graduate program, some undergraduate deficiencies may have to be made up.
b. Seven-semester degrees	May be considered for graduate admission.
c. Eight-, nine-, and ten-semester degrees	May be considered for graduate admission with transfer credit on a course-by-course basis.

Psychology *(Psychologie/Psychologie)*

Study in the field of psychology is offered in all seven of the cantonal universities. In addition, there are several psychological institutes, most of which offer seminars and advanced studies for specialists in the field. The following is a list of such institutes:

1. Alfred Adler Institut Zürich. See No. 7 below.
2. C. G. Jung Institut, Institut für Analytisch Psychologie (Institute for Analytical Psychology), Hornweg 28, 8700 Küsnacht. Est 1948 for training and research in analytical psychology. Has cantonal recognition. Offers courses open to the general public. Provides analytical counseling service. A training program for Jungian analysts requires minimum of 6 semesters and leads to a *Diplom*. Study can be combined with part-time work. The program includes courses in analytical psychology, fundamentals of psychiatry, psychology of dreams, and related areas. Diploma candidates must all undergo personal analysis. There is an intermediate *(propédeutique)* exam at the end of the 3rd semester, by which time the candidate must be at least 28 years old. A final exam and a diploma thesis are required. Lectures are offered in German, English, and Italian. The exams may be written in German, English, or French.

   Admission to the first level of the diploma program requires at least a university first degree or 50 hrs of personal analysis with a Jungian analyst. Admission to the training program for analysts requires a master's degree or the equivalent, 2 or 3 yrs of professional activities in psychology, and 2 semesters of study at the Institute.
3. Daseinsanalytisches Institut für Psychotherapie und Psychosomatik (Existence Analytical Institute for Psychotherapy and Psychosomatics), Sonneggstrasse 55, Zürich. A private institute without cantonal or federal recognition offering graduate level psychoanalytic training to those who have completed university studies in medicine or psychology. The program leading to a *Diplom* includes training in psychoanalysis, psychotherapy, and psychiatry and requires minimum of 3 yrs.
4. Institut für Angewandte Psychologie Zürich (Institute for Applied Psychology of Zurich), Zeltweg 63, 8032 Zürich. Est 1923. Has federal and cantonal recognition. Most students (average age 30) have had 10 yrs' experience in their profession. Three programs are offered: (1) *Berufsberatung* (Vocational Guidance); (2) *Betriebs- und Organisationspsychologie* (Business and Organizational Psychology); (3) *Psychologie Diagnostik und Beratung* (Diagnostic and Guidance Psychology). The programs require 7 semesters (30 hrs a wk for 18 wks) and include practical training. The three specializations have a common core in general psychology, developmental psychology, guidance technique, social psychology, and psychopathology. The degree conferred is the *Diplom in Angewandter Psychologie (dipl. Psychologe)* (Diploma in Applied Psychology). The specialization is indicated on the diploma.

   Admission: (1) For the Vocational Guidance program, one of the following is required: A Maturity Certificate, a Teacher's Certificate, a Diploma of Social Work, a diploma from a higher school of engineering, a diploma from a general education continuation school, or a Certificate of Proficiency in certain fields. (2) For the

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Business and Organizational Psychology program, one of the following is required: a Maturity Certificate, with at least 6 months' practical experience in the field of business psychology; a Primary Teacher's Certificate with at least 1 yr's experience; or a Certificate of Proficiency, with at least 2 yrs' practical experience in a related field. (3) For the Diagnostic and Guidance Psychology program, one of the following is required: a Maturity Certificate; a Primary Teacher's Certificate; a Kindergarten Teacher Certificate; a diploma from a school for social work or school for physical therapy, with at least 1 yr's practical experience; or vocational training and experience in the field.

5. Institut für Ehe und Familie (Institute for Adults and Family), Wiesenstrasse 9, Zürich 8008. Offers graduate-level courses in family therapy. Programs require 1½ yrs of fulltime study or 2 yrs of evening coursework and lead to a certificate. Both programs include 300 classroom hrs, plus 2 wks of concentrated work, and 52 90-minute supervised therapy sessions. Courses are open to medical doctors specializing in psychiatry or psychotherapy, psychologists with degrees from a university or a psychological or psychotherapeutic institute followed by 2 yrs' practical experience, and graduates of social work schools with at least 2 yrs' post-degree experience in the field or equivalent training from other sources. Short courses (2 days to several wks) in therapy also offered.

6. Schweizerische Gesellschaft für Psychoanalyse/Société Suisse de Psychoanalyse/ Società Svizzera di Psicoanalisi (Swiss Society for Psychoanalysis), Wesserstrasse 11, 8053 Zürich. Sponsors courses and seminars in various Swiss cities as part of psychoanalytic training. Courses open only to those undergoing or having completed personal psychoanalysis. No degrees granted.

7. Schweizerische Gesellschaft für Individualpsychologie (Swiss Society for Individual Psychology). Selnaustrasse 15, 8002 Zürich. Sponsors lectures, short courses and seminars in aspects of Adlerian Individual Psychoanalysis; open to Society members and others with interest in field.

   The affiliated Alfred Adler Institut Zürich offers a program of graduate study, requiring 6 semesters of part-time (weekend) study. Classes are held for 4-5 hrs at a time over a period of 11-13 wks. The program, leading to a *Diplom*, includes work in general individual psychology, social, and psychological studies. Open to educators, social workers, psychologists, theologians, and doctors.

8. Stiftung Szondi-Institut (Szondi Institute Foundation), Kräjbühlstrasse 30, 8044 Zürich. Founded by Leopold Szondi. Now under supervision of Federal Department of Interior. Offers a 4-semester basic course in instinct diagnostics and in adult and children's therapy which is obligatory preparation for the Institute's three programs: the *Diplom in Experimenteller Triebdiagnostik und Schicksalspsychologie nach L. Szondi* (Diploma in Experimental Instinct Diagnostics and Destiny Psychology of L. Szondi), 2 additional semesters. The other two programs require 8 additional semesters (a total of 50 courses) and lead to either an *Ausweis* (certificate) or *Diplom* (diploma). The diploma is granted when the student has undergone personal analysis; otherwise the courses are the same.

   Admission is open to university students who have had at least 3 semesters of psychological studies as a major; students who hold a *Diplom in Heilpädagogik und Psychologie* (Diploma in Handicapped Education and Psychology); graduates of the Institut für Angewandte Psychologie (see No. 4) with a *Diplom*; and others with appropriate training, such as physicians.

PSYCHOLOGY: PLACEMENT RECOMMENDATIONS

1. *Lizentiat/Licence*	May be considered for graduate admission with transfer credit on course-by-course basis.
2. *Diplom*, Jung Institut	Represents completion of advanced level study in Jungian psychoanalytic theory.

3. *Diplom*, Daseinsanalytisches Institut	May be considered to have completed advanced level psychoanalytic training.
4. *Diplom in Angewandter Psychologie*	May be considered for graduate admission.
5. *Zeugnis* (Certificate), Institut für Ehe und Familie	May be considered to have a certificate comparable to a master's degree in family therapy from a U.S. institution.
6. *Diplom*, Alfred Adler Institute	May be considered to have completed advanced level study in Adlerian psychology.
7. *Diplom in Experimenteller Triebdiagnostik und Schicksalspsychologie nach L. Szondi*	May be considered for graduate admission with transfer credit on course-by-course basis.
8. *Ausweis/Diplom*, Szondi Institute	May be considered for graduate admission with transfer credit on course-by-course basis.

Social Work *(Sozialarbeit/Service Sociale)*

The only university offering a degree in social work is Université de Fribourg, which has an 8-semester program leading to a *Diplom in Sozialarbeit/Diplôme de service sociale* (Diploma in Social Work). The program requires, in addition, at least 18 months of practical training. A doctorate can also be obtained at this university with further study and the submission of a research thesis.

Study in social work is also offered at the tertiary level in nine schools of social work (listed below), which are under the regulation of the *Schweizerische Arbeitsgemeinschaft der Schulen für Sozialarbeit/Conseil Suisse des Ecoles de Service Social* (Swiss Council of Social Work Schools). All have cantonal recognition.

Applicants for admission must be at least 20 years old and have one of the following secondary school credentials: either a Federal or Cantonal Maturity Certificate, a cantonal *Baccalauréat*, a Primary Teacher's Certificate, a Commercial School Diploma, a Diploma of General Culture from a general education school in canton of Genève, or, if none of these, 2 yrs in a general education continuation school, plus 2 yrs of experience in a related field.

The program at all schools requires 3 yrs (3 yrs and 10 months if part-time) and substantial practical experience in social work. Work in economics, law, social medicine, psychology, and sociology is included. The year is divided into two semesters, usually one of 18 wks, and one of 13 wks, plus a 1-wk fulltime project. The degree is the *Diplom für Sozialarbeit/Diplôme d'assistant social* (Diploma for Social Work). NOTE: The degree has the same designation as the university 8-semester first degree program.

1. Abendschule für Sozialarbeit Luzern, Schlossstrasse 3, 6003 Luzern.
2. Ecole de Service Sociale, Institut d'études sociales, 28 rue Prévost-Martin, 1211, Genève 4.
3. Ecole d'études sociales et pédagogiques, Ecole de Service Sociale et d'animation, Chemin Montolieu 19, 1000 Lausanne 24.
4. Ostschweizerische Schule für Soziale Arbeit, Kapellenstrasse 8, 9000 St. Gallen.
5. Schule für Sozialarbeit Basel, Hebelstrasse 96, 4056 Basel.
6. Schule für Sozialarbeit Luzern, Schweizerhausstrasse 6, 6006 Luzern.
7. Schule für Sozialarbeit Solothurn, Gärtnerstrasse 21, 4500 Solothurn.
8. Schule für Soziale Arbeit Zürich, Bederstrasse 15, 8002 Zurich.
9. Vereinigte Schulen für Sozialarbeit, Bern und Gwatt, Falkenplatz 24, 3012 Bern.

In addition to schools for social work, there are a number of facilities which offer vocational training in institutional education *(Heimerzieher/Educateurs Spécialisés)* for those preparing to work in institutions for the retarded, the handicapped, etc. Admission to this kind of program is usually based on vocational training in a related field at the upper secondary level. The programs require 2-3 yrs of tertiary work; a diploma is awarded. The work is principally vocationally oriented, but some work in pedagogy and psychology may be included. (See Special Education Teachers, Chapter III.)

SOCIAL WORK: PLACEMENT RECOMMENDATIONS

1. *Diplom für Sozialarbeit/Diplôme d'assistant social* (from social work schools)	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
2. *Diplom in Sozialarbeit/Diplôme de service sociale* (Fribourg)	May be considered for graduate admission with transfer credit on a course-by-course basis.
3. *Diplom als Heimerzieher/Diplôme d'Educateurs Spécialisés*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.

Theology *(Theologie/Théologie)*

Theological faculties exist in all seven cantonal universities. Two separate tertiary institutions also offer exclusively Roman Catholic theological studies and grant academic degrees, and five seminaries train for the Roman Catholic priesthood but do not grant any academic degrees. Preparation for entering the Protestant ministry is under university regulation. This reflects the historical struggle between the two principal religious groups of the country. Protestant theological training was removed from the influence of the Roman Catholic Church by placing it within the educational sphere of the university.

All universities except Université de Fribourg have a Theologische evangelisch-reformierte Fakultät (Evangelical-Reformed Theological Faculty) or Faculté de théologie protestante (Faculty of Protestant Theology). At the Universität Freiburg there is a Roman Catholic Theologische Fakultät (Theological Faculty). The Universität Bern has, in addition to the Evangelical-Reformed Theological Faculty, a separate Christkatholisch-theologische Fakultät (Christcatholic Theological Faculty), which prepares students for the ministry in the Christcatholic Church, a small regional sect.

Protestant Theological Training

Students at the universities either study for the first degree of *Pfarrer*[13] (Minister) or *Lizentiat/Licence* (Licentiate). Both programs require at least 8 semesters. The *Pfarrer* program requires at least 6 months' practical training beyond the coursework and prepares for the parish ministry. The *Lizentiat/Licence* programs are educationally oriented and graduates do not qualify for parish assignments, unless special arrangements are made for practical training. Admission to either of these programs requires the standard admissions credentials of the particular university.

13. The term *Pfarrer* also refers to any minister.

A doctorate in the field of theology is offered at all the universities and requires additional study and a research thesis.

The Université de Genève offers a *Certificat en théologie* (Certificate in Theology) to students enrolled in other faculties who complete 6 hrs per week of coursework for 2 yrs in the Faculté de théologie.

The Université de Neuchâtel offers a *Certificat d'études théologiques* (Certificate of Theological Studies) upon completion of a 2-semester certificate program, which does not require a Federal or Cantonal Maturity Certificate for admission. This program is open to Third World ministers who wish to receive additional training and to individuals who wish a basic theological education before becoming deacons in the church. Holders of this certificate may continue in an additional 2-yr program leading to the *Diplôme d'études théologiques* (Diploma of Theological Studies).

The Univerität Basel and the Universität Bern each have a special admissions arrangement with a church-related theological school in the same city. The schools are the following:

1. Kirchlich-Theologische Schule Basel, Leimenstrasse 48, 4051 Basel. Training in two departments is offered. In *Abteilung A* (Department A) students may enroll with any Federal or Cantonal Maturity Certificate except Type A. (Type A students already have the Greek and Latin requisite training for theology programs at the university.) Students follow a 3-yr course at the theology school, studying Greek, Latin, Palestinian geography, philosophy, and theology. They then transfer to Universität Basel at the post-*Vordiplomprüfung* level (intermediate exam at end of 2 yrs of study) to complete work for the degrees of *Pfarrer* or *Lizentiat* in a minimum of 2 additional yrs. The total time necessary to earn the degree is 5 yrs, as opposed to 4 for students who study entirely at the university.

   In *Abteilung B* (Department B), a program is offered which is open to those with only a vocational Certificate of Proficiency or a Cantonal Commercial Maturity Certificate. An entrance exam in French, German, logic, and mathematics is required. After studying 4 yrs at the theological school, students transfer to Universität Basel at the post-*Vordiplomprüfung* level for the last 2 yrs of the degree program leading to a *Pfarrer* or *Lizentiat*. The total period of study for the degree is thus 6 yrs.

2. Kirchlich-Theologische Schule Bern, Neufeldstrasse 6, 3012 Bern. Open to students, ages 20-32, who have completed only a vocational training program after compulsory schooling. An entrance exam in French, German, logic, and speech is required. The studies include courses in bible, church law, Greek, Hebrew, practical theology, philosophy, historical theology, and systematic speculative theology. After 2 yrs of study in the theological school, students may receive a cantonal Theological Maturity Certificate. They then enroll for 2 more yrs at Universität Bern, entering at the post-*Vordiplomprüfung II* level (end of second year). At the theological school they continue to study Greek, Hebrew, and different aspects of theology. The degree awarded is the *Pfarrer* or *Lizentiat* depending on program emphasis.

3. Freie Evangelisch-Theologische Akademie, Mühlestiegrain 50, 4125 Riehen (Canton Basel-Stadt). Private theological academy with cantonal recognition. Est 1970. An exception to the university and church-operated theological schools, it offers a 4-yr program (5 yr if student enters with insufficient knowledge of Greek, Hebrew, and Latin). Admission: open to those with equivalent of a "European high school education, which would make them eligible to enter a European university." A few students without these credentials may be admitted on a 1-yr trial basis.

   The curriculum includes Biblical Hebrew; New Testament Greek; intensive study in Old and New Testament; the biblical world; historical, practical, and systematic theology; missiology; and 1 yr of pedagogy. The graduate has cantonal recognition as an evangelical pastor.

Roman Catholic Theological Training

The only university offering Roman Catholic theology is Université de Fribourg. Studies in Roman Catholic theology require a minimum of 10 semesters for the *Diplom in Theologie/Diplôme en Théologie* (the first degree for those preparing for the priesthood). The *Lizentiat in Pastoraltheologie/Licence en théologie pastorale* also requires 10 semesters and is educationally oriented. In addition to these two degrees, it is possible to obtain an *Abschlusszeugnis in Theologie*, also 10 semesters in length, which indicates qualification for the priesthood with partial completion of the academic requirements for the *Lizentiat*.

In addition to Université de Fribourg,[14] two special institutes offer Roman Catholic theological education:

1. Theologische Fakultät Luzern (Theological Faculty of Luzern), Hirschengraben 10, 6003 Luzern. A cantonally recognized institution in existence since the 1700s. Language of instruction: German. Admission: Federal or Cantonal Maturity Certificate or a Teacher's Certificate and a knowledge of Greek, Hebrew, and Latin. The program begins with a 2-yr basic course in bible, fundamental theology, philosophy, and reflections on the life of Christ, followed by 3 yrs of higher studies which conclude either with a year of pastoral work and a *Diplom in Theologie* (Diploma in Theology) or a research project and the *Lizentiat in Theologie* (Licentiate in Theology). The school also awards the *Doktorat* (Doctorate) and the *Habilitation* (Habilitation), which represents advanced study beyond the doctorate resulting in original research.
2. Theologische Hochschule Chur (Theological Higher School of Chur), Alte Schanfiggerstrasse, 7/9, 7000 Chur. Est 1968 by the Roman Catholic Church through reorganization of existing seminary. Now under jurisdiction of the Bishop of Chur. Received cantonal recognition 1976. Language of instruction: German. Admission: Federal or Cantonal Maturity Certificate.

   The 10-semester program leads to two possible degrees: *Abschlusszeugnis* (Leaving Certificate), for those entering the priesthood, and the *Diplom in Theologie* (Theology) for those preparing for academic teaching in a theological faculty. The first 4 semesters of these two degree programs are identical. Two additional semesters beyond the *Diplom in Theologie* are required for a *Lizentiat in Theologie* (Licentiate in Theology with educational orientation). Non-degree theological seminars are also regularly offered.

Other Theological Studies

1. Institut Oecuménique/Oekumenisches Institut. See Institutes & Special Programs under individual descriptions of the Université de Genève.
2. Baptist Theological Seminary (Baptistische Theologische Hochschule/Faculté de Théologie Baptiste), 8803 Rüschlikon. Est 1949. Originally under sponsorship of Southern Baptist Convention, USA; now under European Baptist Convention. Its aim is to provide international center for ministerial training on high academic level. Faculty: 12. Library: 38,000 vols. Language of instruction: English. Academic Calendar: Sept.-April, two 16-wk semesters.

   Admission: Open to anyone qualified to enter a national university of their home country as a regularly matriculated student. U.S. applicants must possess B.A. from accredited college. Admission to Master of Theology program requires Bach-

14. In the affiliated Katechetisches Institut Luzern, a 3-yr program leading to a *Diplom* is offered which prepares students to teach religion in elementary and secondary schools. The course requires completion of some type of upper secondary program. The first 2 yrs cover theological and pedagogical studies. The third yr includes practical work and further coursework.

elor of Divinity from the Baptist Theological Seminary with at least a *magna cum laude*.

Grading Scale: A+ = 12, excellent; A = 11, excellent; A− = 10, excellent; B+ = 9, good; B = 8, good; B− = 7, good; C+ = 6, average; C = 5, average; C− = 4, average; D+ = 3, passing; D-E = Failure.

Degrees: Bachelor of Divinity, 8 semesters; Master of Theology, 3 semesters; Advanced Diploma in Theology, 2 semesters.

Special Programs: The Seminary has an arrangement which permits students who have received a Master of Theology to undertake doctoral studies in the Faculty of Theology of the University of Zürich. In addition, graduate short-term studies may be undertaken at the Seminary for a maximum of 2 semesters, and continuing education programs in theology (of 2 months' to 1 semester's duration) are offered. Special seminars and study opportunities are also regularly offered to anyone with a minimum of 10 yrs' education who is interested in theological education.

THEOLOGY: PLACEMENT RECOMMENDATIONS

1. *Abschlusszeugnis* from Faculty of Theology	May be considered for graduate admission with transfer credit on course-by-course basis.
2. *Certificat d'études théologiques* (Neuchâtel)	May be considered to have completed one yr of specialized university study in theology.
3. *Diplôme d'études théologiques* (Neuchâtel)	May be considered to have completed 2 yrs beyond the *Certificat d'études théologiques*.
4. *Diplom in Theologie/Diplôme en Théologie*	May be considered for graduate admission with transfer credit on course-by-course basis.
5. *Lizentiat/Licence* (in theology)	May be considered for graduate admission with transfer credit on course-by-course basis.
6. *Pfarrer* (also title)	May be considered for graduate admission with transfer credit on course-by-course basis.
7. *Certificat en théologie* (Genève)	May be considered to have completed 24 semester hrs of undergraduate credit in theology.
8. Bachelor of Divinity	May be considered for graduate admission.
9. Master of Theology	May be considered to have a degree comparable to a master's in theology from a U.S. institution.
10. Advanced Diploma in Theology	May be considered to have completed advanced graduate study in the field of theology.
11. Doctorate	May be considered to have a degree comparable to a Ph.D. in theology from a U.S. institution.
12. *Habilitation*	Represents post-doctoral work in the field of theology.
13. Diploma from Freie Evangelisch-Theologische Akademie	May be considered for graduate admission without transfer credit.

Translator and Interpreter Programs ***(Übersetzer und Dolmetscher/Traducteur et Interprète)***

One university and four private schools offer training in this field:

1. Université de Genève, Ecole de Traduction et d'Interprétation (formerly known as Ecole d'Interprètes), rue de Candolle 2, 1211 Genève 4. Enrollment (1978-79): 374. Language of Instruction: French. The grading scale for both degree programs, with suggested U.S. equivalents, is as follows: 6 = A; 5 = B; 4 = C; 3 = D; 2-1 = F. Grades in specified courses must be at least 4.5. Grades in area subjects are averaged, and an average of 4.75 of all grades is required for passing. A student who fails any exam may repeat it only once.
   Degree Programs:
   (a) The *Diplôme de traducteur* requires a minimum of 4 yrs (6 is not unusual), one yr of which (usually the 2nd) must be spent in a foreign country (this period of study does not regularly appear in transcripts). Admission requires one of the following: Federal Maturity Certificate, Canton Genève Maturity Certificate, diploma from Ecole supérieure de commerce de Genève, or a diploma from Ecole technique supérieure de Genève (with special entrance exam). All applicants must pass an entrance exam in three languages and are expected to have studied each language for 4-5 yrs prior to enrollment.
   The program, which requires the mastery of at least three languages (including the native language), includes the following subjects: international law, international organizations, international terminology, introductory law, political economics, and courses in the law and economy of the countries using the three languages being studied. Languages offered include Arabic, English, French, German, Italian, Russian, Spanish. Chinese (not officially listed) may be used if it is the student's native language.
   Examinations are given throughout the course of study to certify the passing of each section of required work. The subject matter and length of the written exams are as follows: composition in the principal language (literary and technical subject matter), 4 hrs; translation of literary text from language no. 2 into the principal language, 3 hrs; translation of technical text from language no. 3 into principal language, 3 hrs; translation of literary or historical text from principal language into language no. 2, 3 hrs; translation of technical text from principal language into language no. 3, 3 hrs. Oral exams in the three languages include topics chosen from the following subjects: history, a century period in each of the three languages; geography, of all countries where each of the three languages is spoken; political institutions, of all countries where each of the three languages is spoken; literary works, approximately 1,000 pages for each of the three languages. An official report of these exams, *Procès-Verbal d'Examens*, is part of the regular credentials. The diploma lists the three languages in which the student is qualified.
   (b) The *Diplôme d'interprète* (Diploma of Interpreter) is a 3-semester program. Admission requires either the *Diplôme de traducteur* or a university *licence* plus special entrance exams. Applicants with substantial language proficiency and cultural knowledge of other countries who do not hold either of these degrees are occasionally accepted. Part of the requirements for this degree may be met by examination only.
2. Dolmetscherschule St. Gallen/Ecole d'interprètes de St. Gall (Interpreter's School of St. Gallen), Oberer Graben 26, 9111 St. Gallen. Language of Instruction: German. Programs: Private school without cantonal or federal recognition (no connection with the Dolmetscherschule Zürich). Offers 2-yr (minimum) program for the *Übersetzerdiplom* (Translator's Diploma), and 1-yr (additional) program leading to the *Dolmetscherdiplom* (Interpreter's Diploma). Mastery of the three principal languages of Switzerland (French, German, Italian) plus two additional languages from those offered (Arabic, Chinese, Danish, English, Finnish, Greek, Hebrew, Hungarian, Icelandic, Norwegian, Russian, Serbo-Croatian, Swedish, Spanish) is required.

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Coursework in history, international relations, law, and political economy of other countries is included.

Admission: Only a diploma from a 2-3 yr upper secondary general continuation school is required. A student presenting the *Übersetzerdiplom* from this school may have completed only a total of 14 yrs of education, with the *Dolmetscherdiplom*, 15. Neither would be normally admissible to a university in Switzerland.

3. Dolmetscherschule Zürich/Ecole d'interprètes (Interpreter's School), Scheuchzerstrasse 68, 8006 Zürich. Language of Instruction: German. Enrollment: 300. A private school with cantonal recognition (no connection with Dolmetscherschule St. Gallen). Offers courses in English, French, German, Italian, and Spanish for those interested in non-degree language study, as well as the degree programs.

Programs: The program leading to the *Übersetzerdiplom* (Translator's Diploma) requires 3½ yrs (7 semesters, one of which must be spent in a foreign country). At least 2 additional semesters are required to complete the *Dolmetscherdiplom* (Interpreter's Diploma) or the *Konferenz-Dolmetscher Diplom* (Conference Interpreter's Diploma).

The translator's program includes language training and work in economics, history, law, and politics of the countries using each language. Languages offered are Dutch, English, French, German, Italian, Spanish, Swedish. Additional work leading to the Interpreter's Diploma or Conference Interpreter's Diploma covers intensive study in languages and translation techniques.

Admission: The translator's program requires a Federal or Cantonal Maturity Certificate or a commercial diploma. The applicant is expected to be fluent in three languages, one of which must be German. Students without these credentials may enroll in a 2-semester preparatory course and if successful on the entrance exam may enter the regular program. The interpreter's program requires an *Übersetzerdiplom*. Candidates without the standard preparation who present substantial work in the field may be admitted by exception.

4. Ecole Polyglotte, S.A., Ecole internationale d'interprètes, Avenue Riviera 4, 1842 Territet-Montreux. No information available.

5. Schule für Angewandte Linguistik (School of Applied Linguistics), Sonneggstrasse 82, 8006 Zürich. A private school without cantonal or federal recognition. Academic Calendar: Trimester (Oct–Dec; Jan–March; April–June). Admission: Open to anyone 18 or older who has completed compulsory education (9th grade). Admission is possible even without this basic education if applicant can pass an entrance exam on the grammar and literature of two languages.

Programs Offered in two major areas:

- Language Studies: Four to six courses in two languages studied per trimester. Students preparing to be translators or interpreters are expected to take at least two or three foreign languages. There are six levels of language study, and a certificate is awarded on completion of each of the first three. Diplomas (listed below) are awarded on completion of the next three levels. The first three levels are as follows: (1) Elementary—vocabulary, daily language, pronunciation. (2) Intermediate—syntax and written language. (3) Advanced—grammar, essay, correspondence, interpretation.

The next three levels are as follows: (4) Correspondent level—language structure, essay, correspondence, interpretation. Diplomas awarded: *Informationslinguist* (Journalist); *Korrespondent-Dokumentalist* (Correspondent-Documentalist); *Auslandkorrespondent* (Foreign Correspondent). (5) Translator level—3 trimesters—requires completion of Level 4 for admission. Language structure, essay exercises in translation or journalism, interpretation. Diplomas awarded: *Publizist* (Publisher); *Übersetzer* (Translator); *Moderator* (Moderator); *Feuilletonist (Schriftsteller)* (Author, Writer); *Sprachlehrer* (Speech Teacher). (6) Stylistic level—3 trimesters—requires completion of Level 5 for admission. Literary style, essay, editorial, translation, language criticism. Diplomas awarded: *Verhandlungsdolmetscher* (Negotiation Translator); *Sprachkonsulent* (Speech Counselor); *Übersetzungsredaktor* (Translation Editor).

- General Studies: Program leads to a *Diplom* and includes courses in linguistics, literature, history, philosophy & psychology, and humanities. This work is on the level of general continuation education secondary school.

None of the diplomas of this school lead to university admission in Switzerland.

TRANSLATOR AND INTERPRETER PROGRAMS: PLACEMENT RECOMMENDATIONS

1. *Diplôme de traducteur* (Ecole de Traduction et d'Interprétation, Université de Genève)	May be considered for graduate admission.
2. *Diplôme d'interprète* (Ecole de Traduction et d'Interpretation, Université de Genève)	May be considered for graduate admission with transfer credit on a course-by-course basis.
3 *Übersetzerdiplom* (Dolmetscherschule St. Gallen)	May be considered for undergraduate admission with transfer credit in languages, determined by exam or syllabus review.
4. *Dolmetscherdiplom* (Dolmetscherschule St. Gallen)	May be considered for undergraduate admission with transfer credit in languages, determined by exam or syllabus review.
5. *Übersetzerdiplom* (Dolmetscherschule Zürich)	May be considered for graduate admission.
6. *Dolmetscherdiplom* (Dolmetscherschule Zürich)	May be considered for graduate admission with transfer credit on a course-by-course basis.
7. Diplomas from Schule für Angewandte Linguistik: *Informationslinguist, Korrespondent-Dokumentalist, Auslandkorrespondent, Publizist, Übersetzer, Moderator, Feuilletonist (Schriftsteller), Sprachlehrer, Verhandlungsdolmetscher, Sprachkonsulent, Übersetzungsredaktor*	Specialized training in languages. Not academic credentials.
8. Degree from Ecole Polyglotte	As no detailed information is available, no placement recommendation is made.

Advanced Vocational Training

Advanced vocational training is available in many fields and is open to anyone holding a Certificate of Proficiency. Some experience in the field is required for those taking the advanced examination. Training at a more advanced level can also be obtained at a technical school (*Technikerschule/Ecole technique/Scuola tecnica*), a recent development in response to the needs of industrial technology. The schools, of which there are now about 25, may be attached to a vocational trade school offering upper secondary instruction or to a higher school of engineering. A 2-yr training period is most common and leads to the title of "Technician" (*Techniker* TS/*Technicien* ET/*Tecnico* ST). This is not an academic degree and does not provide entrance to other tertiary programs. (Further discussion of this type of program can be found in the section on engineering in this chapter.)

"Master" certification is open to those with a minimum of 3 yrs' experience in a trade following receipt of a Certificate of Proficiency. Additional coursework, covering

the practical side of the trade and the commercial and legal knowledge required to run a business, is usually taken in evening schools. An examination is required. The Master (*Meister/Maître/Maestro*) Certificate confers the right to use a specified title. There are two advanced examination levels: the first leads to a *Brevet* added to the name of the profession, e.g., *expert soudeur avec brevet fédéral* (Expert Solderer with federal diploma); a higher level permits the holder to add *Diplomierter/diplômé/diplomato*, to the name of the profession, e.g., *Diplomierter Handelsreisender* (Certified Accountant). In 22 professions only Masters have the right to train apprentices.

ADVANCED VOCATIONAL CERTIFICATES: PLACEMENT RECOMMENDATIONS

1. *Eidgenössisches Diplom/Brevet fédéral/Diploma federale*	May be considered to have completed advanced vocational training; not an academic qualification.
2. *Diplomierter/Diplôme/Diplomato* (all with field)	May be considered to have completed advanced vocational training; not an academic qualification.

Private American and Canadian Colleges in Switzerland

A small group of private colleges sponsored by American or Canadian organizations or private individuals are patterned after the educational systems of those countries:

1. The American College of Switzerland, 1854 Leysin. Est 1963. Controlled by a private board of trustees, the college is chartered by the canton of Vaud. Recognized in 1977 by the Commission on Higher Education of the Middle States Association of Colleges & Secondary Schools as a candidate for accreditation. Enrollment (1979-80): 230 (from nearly 50 countries). Faculty: 26. Library: 23,000 vols. Academic Calendar: late August-May 30; 2 semesters. Language of Instruction: English. Grading scale: A = 4.0; B = 3.0; C = 2.0; D = 1.0; F = 0. Degrees: Associate in Arts, 2 yrs; Bachelor of Arts, 4 yrs; Bachelor of Science, 4 yrs. Programs: Business Administration, Economics, European Studies, French Language & Literature, Humanities, Modern Languages, Political Science, Social Sciences.
2. Baptist Theological Seminary. See Theology in this chapter.
3. Canadian Junior College, Route d'Oron 79, 1010 Lausanne. Est 1968; ceased operation 1978-79. A branch of the Canadian Junior College of Toronto, it offered students the opportunity to complete Ontario grades 12 and 13. Operated within the jurisdiction of the Ontario Ministry of Education. Admission to Ontario universities is open to Canadian Junior College graduates on the same basis as for graduates of other Ontario schools.
4. Fleming College (former name of Franklin College, No. 5).
5. Franklin College, Via Tesserete 10, 6900 Lugano. Est 1969 as successor to Fleming College. Independent, non-profit 2-yr institution incorporated in the State of Delaware and accredited by the Middle States Association of Colleges & Secondary Schools. Recognized by the canton of Bern. Enrollment (1978-79): 200. Faculty: 18. Academic Year: Sept-June; 2 semesters. Degree: Associate in Arts. Grading Scale: U.S. pattern.
6. Maharishi European Research University, Seelisberg. Est 1975 by Maharishi Mahesh Yogi and sponsored by the Ministry of Education of the World Government of the Age of Enlightenment. Affiliate of the Maharishi International Uni-

versity in Fairfield, Iowa. No U.S. regional accreditation recognition. Degrees: Bachelor of the Science of Creative Intelligence, Master of the Science of Creative Intelligence, Doctor of the Science of Creative Intelligence.

7. Neuchâtel Junior College, Crêt-Taconnet 4, 2000 Neuchâtel. Offers Ontario grade 13 only. Not a tertiary level institution; included here only because of its name as a junior college.

Adult Education

Programs of adult education have existed in Switzerland for at least a quarter of a century. Approved evening schools prepare students for the Federal Maturity Certificate Examination. Students who enroll with this objective have usually completed a vocational training program and have then decided to enter a university. One of the best known of such schools is the Akademikergemeinschaft für Erwachsenenfortbildung AG AKAD (Academic Organization for Adult Education), the Swiss branch of a group of schools with headquarters in Germany.

There are also a number of private schools offering training in business, foreign language study, and preparation courses for entrance into social welfare schools, nursing programs, and the higher schools of business administration and the higher schools of engineering. Courses are held in the evening or offered by correspondence.

There are several "open universities" (*Volksschule* or *Volkshochschule/Universitaires Populaires*), which offer adult education courses. Continuing education programs are also often sponsored by large companies.

Chapter V

Health Fields — Professional Degrees, Nursing, Paramedical Studies

Professional Degrees

The study of dentistry, medicine, pharmacy, and veterinary medicine is federally regulated. The Federal Maturity Certificate is required for admission to study for any of these fields. Only the federally regulated final examination entitles a graduate to establish an independent practice in Switzerland. Foreign students are admitted only if there is extra space. They may not receive the federal diploma nor establish independent practice, and they receive an alternate degree.

The grading scale for all professional medical degree examinations, with the suggested U.S. equivalent, is as follows: 6 (*sehr gut/très bien*) = A; 5 (*gut/bien*) = B; 4 (*genügend/suffisant*) = C; 3 (*ungenügend/insuffisant*) = D; 2 (*schlecht/mauvais*) = F, 1 (*sehr schlecht/très mauvais*) = F. A grade average of 4 is passing. A grade of 1 in any subject results in failure of the whole exam. The student will have a record of each required exam. Each exam may be repeated twice (the third time may only be after 2 additional semesters of study). Diplomas are normally issued in the language of the area where the exam was taken.

Dentistry

The first degree is *Zahnarzt/Diplôme fédéral de médecin-dentiste* (Dentist). Foreign students receive the *Diplom als Zahnarzt/Licence en médecine dentaire* (Diploma in Dental Medicine). Dental training is offered by the medical faculties of the Universities of Basel, Bern, Genève, and Zürich. The first and second years of the program can be completed at the Universities of Fribourg and Lausanne; the first year can be completed at the University of Neuchâtel. Students from these universities have to transfer to one of the other four to complete the degree program. The 5-yr program is structured as follows:

1st & 2nd years: See Medicine; programs identical through 2nd federal exam.

3rd year: First year of clinical study; coursework in anatomy, microbiology, pathology, and pathophysiology. It is followed by *Klinische Grundfächerprüfung/Examen des branches cliniques de base* (third federal exam), which covers basic clinical studies.

4th & 5th years: Specialized dental studies, followed by the *Fachprüfung für Zahnärzte/Examen professionnel* (final federal exam).

An advanced degree, *Doctor medicinae dentalis*, is granted by the same four universities which offer the first degree in dentistry. The doctorate requires several years of practice and submission of a research thesis.

Medicine

The first degree is *Arzt/Diplôme fédéral de médecin*, granted by the Swiss Confederation. Foreign students receive either the *Diplom als Arzt* from one of the three German-language universities (Basel, Bern, and Zürich), or the *Certificat de fin d'études médicales* from the University of Genève or the *Diplôme de médecin conféré par l'Université de Lausanne*. The full course of study is offered at the Universities of Basel, Bern, Genève, Lausanne, and Zürich. The first 5 semesters can be completed at the University of Fribourg and the first 2 semesters at the University of Neuchâtel. The program, requiring 6 years (6½ prior to 1970), is structured as follows:

1st year: Biology, biophysics, chemistry, introductory medicine, medical biochemistry, physics, physiology, psychology, statistics, and practical work with the microscope, including methodology and osteology. At the end of the first year, the *Naturwissenschaftliche Prüfung/Examen de sciences naturelles* (first federal examination), which covers natural sciences, is given. (Students admitted with a U.S. Bachelor's of Science are considered eligible to enter directly into the second year of medical studies).

2nd year: The beginning of official medical studies. Coursework includes anatomy, biochemistry, embryology, histology, physiology, and the study of normal man. This is followed by the *Anatomisch-physiologische Prüfung/Examen d'anatomie et de physiologie* (second federal exam) which covers anatomy and physiology.

3rd year: Medical clinic, microbiology, pathology, physiopathology, semiology, and surgical clinic. At the end of the third year the *Klinische Grundfächerprüfung/Examen des branches cliniques de base* (third federal exam), which covers basic clinical branches, is taken.

4th & 5th years: Training in hospitals and institutes.

6th year: Intensive study in chosen specialization, followed by the *Fachprüfung für Ärzte/Examen professionnel* (final federal exam), which leads to the federal diploma.

A further degree, the *Doctor medicinae*, may be obtained at the same universities which offer the first degree. An additional internship and a research thesis are required. The advanced degree is open to foreigners who hold a medical degree, as well as to Swiss citizens.

In every medical specialization, there are qualifying examinations established by the Foederatio Medicorum Helveticorum (Federation of Swiss Doctors), which confers the title of *Spezialarzttitel* FMH/*Spécialiste* FMH.

Pharmacy

The first degree is *Apotheker/Pharmacien diplômé fédéral* (Pharmacist). Foreign students receive the *Diplom als Apotheker/Diplôme de Pharmacien* (Genève) or *Diplôme universitaire de pharmacien* (Lausanne). Pharmacy degrees are offered by the following universities: Basel (program discontinued in 1978), Bern, Genève, Lausanne, and the Eidgenössische Technische Hochschule Zürich. The first three semesters can be completed in the Faculties of Science of the Universities of Fribourg and of Neuchâtel.

The program requires 5½ years (11 semesters); in autumn 1978, this was reduced to 10 semesters by shortening each semester slightly. It was structured as follows:

—three semesters of study in natural sciences (botany, chemistry, physics), followed by the first federal examination covering *Naturwissenschaftliche Prüfung/Examen de sciences naturelles* (Natural Science). (This is not the same examination required in dentistry and medicine).

—three semesters of practical training in a pharmacy, followed by the examination of *Assistentenprüfung/Examen d'assistant-pharmacien* (Assistant Pharmacist). Foreign

students in pharmacy studies must have completed practical training before admission.

—five semesters of university studies in specialization subjects followed by the *Fachprüfung/Examen professionnel* (final federal professional exam).

A research doctorate may be obtained at the same universities which offer the first degree program. It requires a period of practical experience, further study, and a research thesis. This degree is open to both Swiss citizens and foreigners.

Veterinary Medicine

The first degree is *Tierarzt* (Veterinarian)/*Diplôme de médecin vétérinaire deliveré par la Confédération Suisse* (Diploma of Veterinary Doctor Awarded by the Swiss Confederation). Foreigners are not normally admitted. Veterinary training is offered only at the Universities of Bern and of Zürich. The first years of study may be taken at the Universities of Basel (medical faculty), Genève (medical faculty), Fribourg (science faculty), Lausanne (medical faculty), and Neuchâtel (science faculty). The 5-year program is structured as follows:

1st & 2nd years: See Medicine; programs identical through 2nd federal exam.

3rd-5th years: Specialization and clinical training, followed by the final *Fachprüfung/Examen professionnel* (federal professional exam). Since autumn 1977, the final exam has been divided into two parts, the 1st to be taken at the end of the 4th year and the 2nd at the end of the 5th. A further degree, *Doctor medicinae veterinariae*, may be earned by those completing several more years of study and research leading to a thesis. Specialization is indicated by a *Spezialtierarzt* FVH/*Vétérinaire spécialiste* FVH, conferred by the Foederatio Veterinariorum Helveticorum, FVH (Federation of Swiss Veterinarians).

Specialized Medical Study

As noted under the descriptions of dentistry, medicine, pharmacy, and veterinary medicine, it is possible to obtain a research doctorate in each of the fields from the university and to obtain specialization titles from the professional association in each field. One separate institution offers specialized study: Tropenschule des Schweizerischen Tropeninstituts Basel[1] (Tropical School of the Swiss Tropical Institute of Basel), Socinstrasse 57, 4051 Basel.

The institute was established in 1943 and includes a Department of Tropical Medicine, Department of Tropical Biology, Section of Ultrastructural Morphology, and a School of Tropical Agrotechnics. General seminars and research opportunities in the field exist at the Institute. In addition, there are two degree programs, one in Tropical Agriculture (described under Agriculture, Chapter IV) and the other in Tropical Medicine. The course in Tropical Medicine is open to biologists, physicians, veterinarians, and students studying for the first medical degree. The course requires 3 months and leads to the *Tropenmedizinisches Diplom/Diplôme de médecine tropicale* (Diploma of Tropical Medicine), if the individual holds a medical first degree, or to a provisional certificate for those studying for the first degree or those admitted without the first medical degree.

1. In 1981 the school will become the Technikum für Tropische Landwirtschaft.

PROFESSIONAL DEGREES FOR HEALTH FIELDS: PLACEMENT RECOMMENDATIONS

The degrees of Dentist, Physician, Pharmacist, and Veterinarian are comparable to the same degrees in the United States. Graduates will not have completed similar general education, but the professional studies are equivalent. Students who have completed only the first year of any of the medical programs will have completed a year of basic college level science study.

Official Examinations:

1. *Naturwissenschaftliche Prüfung/ Examen de sciences naturelles*	May be considered for undergraduate admission with transfer credit on course-by-course basis.
2. *Anatomisch-physiologische Prüfung/ Examen d'anatomie et de physiologie*	May be considered for undergraduate admission with transfer credit on course-by-course basis.
3. *Klinische Grundfächerprüfung/ Examen des branches cliniques de base*	May be considered for undergraduate admission with transfer credit on course-by-course basis.

Dental Degrees: Placement Recommendations

1. *Zahnarzt/Diplôme fédéral de médecin-dentiste Diplom als Zahnarzt/Licence en médecine dentaire*	May be considered to have a degree comparable to a D.D.S. from a U.S. institution.
2. *Doctor medicinus dentalis*	May be considered to have a degree comparable to advanced specialization in the field of dentistry in the USA.

Medicine: Placement Recommendations

1. *Arzt/Diplôme fédéral de médecin Diplom als Arzt/Certificat de fin d'études médicales Diplôme de médecin conféré par l'Université de Lausanne*	May be considered to have a degree comparable to an M.D. degree from a U.S. institution
2. *Doctor medicinae Spezialarzttitel FMH/ Spécialiste FMH*	May be considered to have a degree comparable to advanced specialization in the field of medicine in the USA.

Pharmacy: Placement Recommendations

1. *Assistentenprüfung/Examen d'assistant-pharmacien*	May be considered for undergraduate admission with transfer credit on course-by-course basis.
2. *Apotheker/Pharmacien diplômé fédéral Diplom als Apotheker/Diplôme de Pharmacien Diplôme universitaire de pharmacien*	May be considered to have a degree comparable to a first professional degree in pharmacy in the USA.
3. Doctorate in Pharmacy	May be considered to have a degree comparable to a Ph.D. in the field of pharmacy from a U.S. institution.

Veterinary Medicine: Placement Recommendations

1. *Tierarzt/Diplôme de médecin vétérinaire deliveré par la Confédération Suisse*	May be considered to have a degree comparable to a D.V.M. degree from a U.S. institution.
2. *Doctor medicinae veterinariae*	May be considered to have a degree comparable to completion of advanced specialization in veterinary medicine.
3. *Spezialtierarzt* FVH/ *Vétérinaire spécialiste* FVH	May be considered to have a degree comparable to completion of advanced specialization in veterinary medicine.

Specialized Medical Study: Placement Recommendations

1. *Tropenmedizinisches Diplom/ Diplôme de médecine tropicale*	May be considered for one semester of undergraduate transfer credit.

Nursing

There are a number of different types of nursing training, ranging from a vocational apprenticeship entered immediately after the 9 yrs of compulsory schooling to advanced training for graduate nurses.[2] Since 1903 the Swiss Red Cross (Schweizerisches Rotes Kreuz/Croix-Rouge suisse) has been charged by the Confederation with the accreditation of Swiss schools of nursing. In 1951, a federal act conferred upon the Swiss Red Cross the responsibility for the professional preparation of nurses. This was later extended to include other paramedical personnel training. Not until 1976 was an agreement with all the cantons signed; this gave cantonal authorization to the Swiss Red Cross to carry out these responsibilities which it had in effect been doing for some years.

The Swiss Red Cross sets standards for nursing schools, teaching programs, and admissions requirements. There are several sub-categories of nursing preparation, each having different admission prerequisites and different training.[3]

Training for general care, maternal & pediatric care, and psychiatric nursing is most properly classified as tertiary education. The entrance age for all three programs is 18 and the entrance exam requires upper secondary science knowledge, although not the full science requirements of the Maturity Certificate exam. Most students who enter nursing training will have had at least 11 yrs of primary and secondary education.

The program of studies for all three programs, in addition to the special medical subjects of the field, includes general studies and basic sciences, as follows: civics & law, 20-25 hrs; anatomy, biology & physiology, 150 hrs; microbiology, 20 hrs; medical arithmetic, 10 hrs; nutrition, 10 hrs; physics & chemistry, 30 hrs; psychology, 30 hrs; pedagogy, 3 hrs; and sociology, 25 hrs.

Preparatory Programs for Nursing Training

In about half the cantons there are special preparatory programs for nursing or paramedical studies on the upper secondary level, offered in cantonal upper secondary

2. Specific questions regarding nursing can be addressed to the Swiss Red Cross, Rainmattstrasse 10, 3001 Bern, Switzerland.

3. Particular care needs to be taken in considering nursing credentials. The word "nurse" in French refers to a child's nurse. Translations from German and French provided by the applicant may use the term "nurse" to refer to any one of the various categories of nursing which are detailed in this section.

schools, private schools, commercial schools, or separate nursing or paramedical preparatory schools. They are referred to as *Vorschule für Pflegeberufe* (preschool for nursing vocation), *Schule für Spitalberufe* (school for hospital vocation), *Ecole préparatoire aux professions paramédicales* (preparatory school for paramedical professions), or *Scuola propedeutica per le professioni sanitarie e sociali* (preparatory school for health and social professions). The programs generally require 3 yrs.

NURSING PROGRAMS FOR GRADUATE NURSES

- **General Care Nurse** *(Krankenschwester für allgemeine Krankenpflege/Infirmière en soins généraux).* (The occupation is also open to men, who are called *Krankenpfleger/Infirmier.*)[4] Admission: Open to those between 18 and 32 who have completed at least 9 yrs of school in a program in which biology, chemistry, and physics were included, have knowledge of a foreign language, and pass an entrance exam. In actuality, few students enter nursing programs directly from compulsory schooling. The level of information in sciences required for the entrance exam requires a minimum of 2-3 yrs' additional study. The program for nursing training requires 3 yrs and leads to a diploma signed by the Swiss Red Cross, the accrediting body, which has both cantonal and federal recognition.
- **Maternal Hygiene and Pediatric Care Nurse.** The Swiss Red Cross approves schools for training maternal hygiene and pediatric nurses *(Schwester für Kinderkrankenpflege, Wochen- und Säuglingspflege* (KWS)/*Infirmière en hygiène maternelle et pédiatrie* (HMP). Admission: Applicants must be at least 18 and have completed 9 yrs of compulsory schooling in which biology, chemistry, and physics were included, have knowledge of a foreign language, and have passed the entrance exam. Students rarely enter the program immediately after the 9-yr school period, as the entrance exam requires at least 2-3 yrs of additional study. The program requires 3 yrs and leads to a *Diplom/Diplôme,* which will show the specialization.
- **Psychiatric Nurse.** Psychiatric nurses may be either a "Nursing Sister in Psychiatry" *(Psychiatrieschwester/Infirmière en psychiatrie)* or a "Nurse, Male, in Psychiatry" *(Psychiatriepfleger/Infirmier en psychiatrie).* Training schools are accredited by the Swiss Red Cross. Admission: Open to those 18-35, who have completed compulsory schooling and know a second language. The program requires 3 yrs and leads to the *Diplom/Diplôme.* The final exam is taken in the presence of members of the Swiss Society of Psychiatry and the Swiss Red Cross; both organizations recognize the diploma.
- **Midwife** *(Hebamme/Sage-Femme).* Schools for midwifery training are accredited by the Conference of Cantonal Directors of Public Health.[5] Admission: Open to those at least 18, requires 9 yrs' compulsory schooling and "if possible" additional years of schooling. The program is 3 yrs in length for those without other nursing training, 1½ yrs for those with a General Nursing or Maternal Health Nursing Diploma. The diploma, countersigned by a representative of the Conference of Directors of Public Health, the Director of the school, and a representative of the cantonal Office of Public Health, has Confederation recognition.

ADVANCED NURSING TRAINING

There are two schools, established by the Swiss Red Cross, which offer advanced training for nurses with diplomas who wish to become Nurse Teachers or nursing school administrators. The course requires 10 months; there is also a 2-month course

4. In German, a female nurse is known as *Krankenschwester* (nursing sister) rather than *Krankenpflegerin* (female nurse). This reflects the historic role of the Roman Catholic Church in training nuns as nursing sisters.

5. The Swiss Red Cross has just assumed responsibility for midwifery education. Schools for midwifery training will be first recognized by the Red Cross in 1980.

for training to be a Head Nurse. The schools are (1) Ecole supérieure d'enseignement Infirmier, 9 chemin de Verdonnet, 1010 Lausanne. Est 1956. Language of Instruction: French. (2) Kaderschule für die Krankenpflege, 15 Moussonstrasse, 8044 Zürich. Est 1950. Language of Instruction: German.

Those with a General Care Nurse Diploma may also pursue further studies in other specializations, primarily in hospitals, under the supervision of the Swiss Association of Licensed Nurses. Approved specializations are Intensive Care Nursing, 2 additional yrs; Midwifery, 1½ years; Nurse Anesthetist, 2 years; Operating Theater Nurse, 2 yrs; Public Health Nurse, 3 yrs.

NURSING EDUCATION: PLACEMENT RECOMMENDATIONS

1. Diploma from preparatory school	May be considered for freshman admission where a general (not university preparation) background is considered appropriate.
2. Nurse: General Care *Krankenschwester für allgemeine Krankenpflege/Infirmière en soins généraux* *Krankenpfleger/Infirmier*	May be considered for undergraduate admission with advanced standing credit to be determined as for graduates of U.S. hospital schools of nursing.
3. Nurse: Maternal Hygiene & Pediatric Care *Schwester für Kinderkrankenpflege, Wochen- und Säuglingspflege* (KWS)/ *Infirmière en hygiène maternelle et pédiatrie* (HMP)	May be considered for undergraduate admission with advanced standing credit to be determined as for graduates of U.S. hospital schools of nursing.
4. Nurse: Psychiatric *Psychiatrieschwester/Infirmière en psychiatrie* *Psychiatriepfleger/Infirmier en psychiatrie*	May be considered for undergraduate admission with advanced standing credit to be determined as for graduates of U.S. hospital schools of nursing.
5. Nurse: Midwife *Hebamme/Sage-Femme*	May be considered for undergraduate admission with advanced standing credit to be determined as for graduates of U.S. hospital schools of nursing.
6. Advanced Nursing Training: Nurse Teacher	May be considered for undergraduate admission with advanced standing credit to be determined as for graduates of U.S. hospital schools of nursing.
Head Nurse Intensive Care Nurse Nurse Anesthetist Operating Theater Nurse Public Health Nurse	May be considered to have completed advanced vocational training. Not an academic qualification.

NURSING PROGRAMS SECONDARY LEVEL

Nursing Assistant. Training for the vocation of Nursing Assistant (*Krankenpflegerin* FA SRK/*Infirmière-Assistente* CC CRS; *Krankenpfleger* FA SRK/*Infirmier-assistant* CC CRS)[6] is open to anyone 18 or older who has completed compulsory education. The

6. FA SRK = *Fähigkeitsausweis Schweizerisches Rotes Kreuz*: CC CRS = *Certificat de capacité, Croix-Rouge Suisse.*

1- to 1½-year training program includes 460 hrs of academic work in the following subjects: anatomy & physiology (40 hrs); civics & law (10 hrs); drugs (16 hrs); ethics for nursing (14 hrs); history of nursing (4 hrs); hygiene & public health (20 hrs); medical arithmetic (14 hrs); native language (12 hrs); nursing (228 hrs); nursing problems & funds (12 hrs); nutrition (8 hrs); pathology (50 hrs); psychology (12 hrs). There are 25 approved schools for Nursing Assistant training.

Doctor's Aide. The training program for a Doctor's Aide (*Arztgehilfin/Aide médicale*) is regulated by the Society of Swiss Medical Doctors. It is a 3-yr vocational apprenticeship program which can be entered after compulsory school. A number of private schools also offer this program as a fulltime course.

Family Aide. The Family Aide (*Hauspflegerin/Aide familiale*) program provides vocational training for those 18 or older. The 18-21 month program requires 9 months of vocational coursework with the balance spent as an intern in a family service establishment. There are 10 schools recognized for this training by the Swiss Society of Family Aide Organizations.

Hospital Aide. The training for Hospital Aide (*Spitalgehilfin/Aide hospitalière*) is under vocational secondary education and is regulated by the Federal Vocational Training Office. The 1-year program leads to a Certificate of Proficiency. The Swiss Society of Medical Establishments has approved 30 hospitals for this type of training.

Child's Nurse. Training to become a Child's Nurse (*Kinderpflegerin/Nurse*) is vocational, open to those 18 or older, and requires 1 to 1½ years. No specific education beyond the compulsory schooling is required for admission. Ten cantons have approved schools or childcare centers where this training is offered.

SECONDARY LEVEL NURSING: PLACEMENT RECOMMENDATIONS

1. Nursing Assistant (*Krankenpflegerin* FA SRK/*Infirmière-Assistente* CC CRS; *Krankenpfleger* FA SRK/*Infirmier-assistant* CC CRS)	May be placed in grade 11.
2. Doctor's Aide (*Arztgehilfin/ Aide médicale*)	May be considered for freshman admission where vocational training is considered appropriate preparation.
3. Family Aide (*Hauspflegerin/ Aide familiale*)	May be placed in grade 11.
4. Hospital Aide (*Spitalgehilfin/ Aide hospitalière*)	May be placed in grade 11.
5. Child's Nurse (*Kinderpflegerin/ Nurse*)	May be placed in grade 11.

Paramedical Studies

Paramedical studies, such as dental hygiene, dietetics, etc., are generally regulated by professional societies in the field or by the Swiss Red Cross. Schools providing such training usually have federal and cantonal approval as well. Details for each vocational area follow.

Dental fields: (a) Dental Aide (*Zahnarztgehilfin/Aide de Dentiste*). Two-yr upper secondary vocational training provided by apprenticeship; open to anyone at least 16 who has completed compulsory schooling.

(b) Dental Hygienist (*Dentalhygienikerin/Hygiéniste dentaire*). There are two schools for dental hygienists: (1) Dentalhygiene-Schule, Minervastrasse 99, 8032 Zürich. Est

1973: first school of this type in Switzerland. (2) Ecole d'hygiénistes dentaires de Genève, 19, rue Barthélémy-Menn, 1211 Genève 4. Est 1976, the 2-yr vocationally oriented program is open to women only, between 18 and 32, who have completed 3 yrs of upper secondary schooling or "similar" preparation. Both schools are under the regulation of the Swiss Dental Society, and the cantons in which they are located.

Dietician *(Diätassistentin/Diététicien)*. There are three programs: Ecole de diététiciennes de Genève; Kantonsspital, Zürich; Schule für Diätassistentinnen und- assistenten am Inselspital Bern. Open to those 17-35 who have completed upper secondary school, have knowledge of two languages, and have had some practical experience in a related area. All programs require 3 yrs of study, of which the first 1 to 1½ yrs involve theoretical studies; the rest of the program is primarily practical experience in hospitals under the direction of a licensed dietitian.

Hospital Superintendent *(Hausbeamtin/Intendante)*.[7] There are three training schools: Frauenschule der Stadt Bern; Hausbeamtinnenschule am Tochterinstitut Baldegg; Haushaltungsschule Zürich. Regulated by the Swiss Association of Licensed Superintendents and the Swiss Association of Establishment for the Sick. Admission: Open to those 18 or older who have completed an upper secondary commercial school program, spent time in a foreign country, and have had a household apprenticeship. The program requires 3-4 yrs of vocational study and practical training in hospital management (food purchasing, laundry, personnel, supplies, and billing).

Hospital Administrative Employee *(Verwaltungsangestellte/Employé d'administration)*. Training for this vocation may be obtained either by vocational apprenticeship in a hospital leading to a Certificate of Proficiency or by studies in a secondary commercial school.

Optician *(Optiker/Opticien)*. A specialized vocational school. Schweizerische Höhere Fachschule für Augenoptik (Swiss Higher Specialization School for Eye Optics) is located in Olten. The 4-semester opticians' training program is regulated by the Schweizerischen Optikerverband SOV (Swiss Society of Opticians) and leads to the *Eidgenössisches Diplom für Augenoptik/Diplôme fédéral d'opticien lunetier*. Admission requires a 4-yr Certificate of Proficiency, plus 2 yrs' practical work and passing grades on the entrance exam.

Optician's Aide *(Orthoptistin/Aide Orthoptiste)*. There are six schools approved by the Swiss Society of Opthalmologists for training as an Optician's Aide. The Society regulates and authorizes the diploma. Admission to the 3-yr program requires the applicant to be at least 18 and have completed secondary studies, preferably with a Maturity Certificate. Knowledge of a second national language and stenography is required. Knowledge of English is desirable.

Pharmacy Aide *(Apothekerhelferin/Aide en pharmacie)*. Training to be a Pharmacy Aide requires a 3-yr vocational upper secondary apprenticeship entered on completion of the 9 years' compulsory schooling.

Social Worker *(Sozialarbeiter(in)/Assistant(e) social(e)*. See Social Work, Chapter IV, for details.

Technician. (a) Medical Laboratory Technician *(Medizinische Laborant(in)/Laborant (ine) médicale)*. Training regulated by Swiss Red Cross. Program requires 2½ to 3 yrs. Two types of schools: Type I does not include practical training in hospital laboratories. Type II includes this training. Both types include basic science training in anatomy, biochemistry, biology, chemistry, mathematics, pathology, physiology and physics. The diploma is countersigned by the Swiss Red Cross and has federal recognition. Admission: Open to those at least 17 who have completed at least 10 yrs of schooling.

7. The Hotel Schools at Glion and Lausanne also offer training for advanced level Hospital Managers. See section on hotel schools, Chapter IV.

It is also possible to become a laboratory assistant through apprenticeship training. Admission: Open to those at least 16 who have completed 9 yrs' schooling. Not an academically oriented program, it leads to the Certificate of Proficiency.

(b) X-Ray Technician *(Technische Röntgenassistent(in)/Assistant(e) technique en radiologie)*. The 3-yr program, under regulation of the Federal Department of Interior, includes practical training in university institutes of radiology, cantonal and regional hospitals, or approved private offices and clinics. Theoretical training is taken in one of the regional Swiss courses for radiology technicians offered in Basel, Bellinzona, Bern, Lausanne, and Zürich. The diploma has federal and cantonal recognition. Admission: Open to those at least 18 who have upper secondary schooling or show "equivalent ability to assimilate theoretical courses."

Therapist. (a) Occupational Therapist *(Ergotherapeutin/Ergothérapeute)*. There are three approved schools of occupational therapy: Ecole d'ergothérapie, Schützengasse 51, 2502 Bienne; Ecole d'ergothérapie, chemin de Montolieu 10, 1000 Lausanne; Schule für Ergotherapie, Kraftstrasse 22, 8044 Zürich.

The 3-yr program leads to a diploma, which is sanctioned by the Swiss Society of Occupational Therapists, and has cantonal and federal recognition. A year of practical training is also included in the program. Admission: Open to those 19 to 30 who have completed 11 to 12 yrs of schooling or the equivalent.

(b) Physical Therapist *(Physiotherapeutin/Physiothérapeute)*. Admission is open to those at least 18 who have a general upper secondary education which "include a solid base secondary training." The 3-yr program leads to a cantonally recognized diploma.

Private Medically-Related Training

Collège Européen d'Hygiène et de Médecine Naturelles (European College of Hygiene and Natural Medicine). This college has affiliated institutes in three countries: France, Portugal, and Switzerland. The college is private with no federal recognition in any of the three countries. The Swiss institute is located at 58/60 rue de Carouge, 1205 Genève. The programs are divided into 3 cycles: The first cycle is open to anyone; no academic credentials required. The 2nd and 3rd cycles require completion of the previous cycle. Much of the work is done by correspondence. Certificates awarded are the following:

First Cycle Diploma—*Diplôme de Conseiller Hygiéniste Nutritionniste* (Diploma Counselor of Nutritional Hygiene)—average length of study, 2 yrs.

Second Cycle Diploma—*Diplôme de Practien de Santé* (Diploma of Health Practitioner)—average length of study, 2 yrs.

Third Cycle Diploma—*Doctorat en Naturopathie* (Doctorate in Naturopathy)—2 additional yrs, primarily of correspondence coursework, are normally required to complete the third cycle.

PARAMEDICAL STUDIES: PLACEMENT RECOMMENDATIONS

1. Dental Fields	
a. Dental Aide *(Zahnarztgehilfin/Aide de Dentiste)*	May be placed in grade 12.
b. Dental Hygienist *(Dental-hygienikerin/Hygiéniste dentaire)*	May be considered for undergraduate admission with transfer credit on course-by-course basis.
2. Dietician *(Diätassistentin/ Diététicien)*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.

3. Hospital Superintendent *(Hausbeamtin/Intendante)*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
4. Certificate of Proficiency *(Fähigkeitszeugnis/Certificat de capacité/Attestato di capacità)* for hospital administrative employee *(Verwaltungsangestellte/Employé d'administration)*	a. Completion of 2-yr program: May be placed in grade 10 or 11, based on review of program content. b. Completion of 3-yr program: May be considered for freshman admission where vocational training is considered appropriate preparation.
5. Optician *(Optiker/Opticien)*	May be considered for undergraduate admission with transfer credit on course-by-course basis.
6. Optician's Aide *(Orthoptistin/Aide Orthoptiste)*	May be considered for undergraduate admission with transfer credit on course-by-course basis.
7. Pharmacy Aide *(Apothekerhelferin/Aide en pharmacie)*	May be considered for freshman admission where vocational training is considered appropriate preparation.
8a. Medical Laboratory Technician *(Medizinische Laborant(in)/Laborant(ine) médicale)*	May be considered for freshman admission where vocational training is considered appropriate preparation.
8b. X-Ray Technician *(Technische Röntgenassistent(in)/Assistant(e) technique en radiologie)*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
9. Therapist	
a. Occupational Therapist *(Ergotherapeutin/Ergothérapeute)*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
b. Physical Therapist *(Physiotherapeutin/Physiothérapeute)*	May be considered for undergraduate admission with transfer credit on a course-by-course basis.
10. Diplomas from Collège Européen d'Hygiène et de Médecine Naturelles	May be considered on the same basis as students from nonaccredited U.S. institutions.

Appendix A

Designations of Primary and Secondary Programs Kindergarten Through Grade 13

German	
Abschlussklasse	Terminal class—basic upper primary, grades 7-9.
Allgemeine und Landwirtschaftliche Fortbildungschule	General and agricultural continuation education school—upper secondary, grades 10-11.
Arbeitslehrerinnenseminar	Handicraft teacher training seminar—upper secondary, grades 10-12.
Arbeitsschullehrerinnenseminar	Handicraft school teacher seminar—upper secondary teacher training, grades 10-12.
Berufliche Ausbildung	Vocational development.
Berufsbildung	Vocational education.
Berufslehre	Apprenticeship.
Berufsmittelschule	Vocational middle school—upper secondary, grades 10-13; part-time school offering additional academic training for gifted apprentices.
Berufsschule	Vocational school—upper secondary part-time school for apprentices, grades 10-13.
Berufsschule für Verkehr	Vocational school for transportation—upper secondary, full-time, grades 10-11.
Berufsvorbereitungsschule	Vocational preparation school—upper secondary.
Berufswahlklasse or *Berufswahlschule*	Vocational class—basic upper primary, grade 9.
Bezirksschule	District school—lower secondary, either intermediate or academic, grades 6-9.
Diplommittelschule	Diploma middle school—general education continuation, grades 10-11, or grades 10-13.
Einschulungsklasse	Special class—for handicapped, grades 1-8.
Elementarschule	Elementary school—grades 1-4 or 1-6.
Erweiterte Oberschule	Expanded upper school—intermediate lower secondary, grades 7-9.
Fachschule	Special subject school—vocational upper secondary or tertiary.
Förderklasse	Promotion class—terminal programs for handicapped students, grades 1-6.
Fortbildungschule	Continuation education school—grades 10-11.
Fortbildungs- Anschluss- und Vorbereitungsklasse	Continuation education, terminal and preparatory class—grades 10-11.
Frauenbildungs- und Mädchenschule	Women's education and girls' school.
Frauenfachschule	Women's vocational school—grades 10-11.
Gemeindeschule	Community school—grades 1-4 or 1-6.
Gewerbeschule or *Gewerbliche Berufsschule*	Technical school—part-time school for apprentices at upper secondary level, grades 10-13.

Gymnasium	Gymnasium—academic upper secondary, grades 10-12, 10-12½, 10-13.*
Handelsdiplomschule	Commercial diploma school—fulltime upper secondary, grades 10-12.
Handelsmaturitätsschule	Commercial maturity school—fulltime upper secondary program leading to commercial maturity certificate, grades 10-13.
Handelsschule	Commercial school—fulltime upper secondary school, grades 10-12 or 10-13.
Handwerkschule	Craftsman school—intermediate lower secondary with vocational orientation, grade 9.
Hausbeamtinnenseminar or *Haushaltungslehrerinnenseminar*	Home economics seminar—home economics teacher training seminar, upper secondary, grades 10-12 or 10-13.
Hauswirtschaftsklasse	Home economics class—intermediate lower secondary, grade 9.
Hauswirtschaftslehrerinnenseminar	Home economics teacher training seminar—upper secondary, grades 10-12 or 13.
Hauswirtschaftsschule	Home economics school—grades 9- or 10-11.
Heimerzieherschule	Institutional educator school—three years tertiary.
Hilfschule	Handicapped school—grades 1-9.
Höhere Mittelschule	Upper middle school—either grades 6-9 or 10-12.
Höhere pädagogische Lehranstalt	Higher pedagogical institute—two-year tertiary.
Humanistisches Gymnasium	Humanities gymnasium—academic upper secondary, grades 10-13; preparation for maturity exam, types A & B.
Industrieschule	Industrial school—vocational upper secondary, grades 10-12.
Kantonsschule	Canton school—usually academic upper secondary, grades 10-13, but may include intermediate programs; also may include commercial and *unterseminar* teacher training programs as well as lower secondary, grades 7-9.
Kaufmännische Berufsschule	Business vocational school—part-time upper secondary, grades 10-12.
Kindergarten	Kindergarten—preschool class for 5-year-olds.
Kindergärtnerinnenseminar	Kindergarten teacher training seminar—usually upper secondary, grades 10-11, or 11-12; occasionally grades 13-14.
Kleinkinderschule	Small children's school—preschool class.
Kleinklasse	Special education class—grades 1-9.
Kollegium	"College"—academic upper secondary, grades 10-13.
Kooperative Mittelpunktschule	Cooperative middle school—basic, intermediate, and academic tracks in one school, grades 7-9.
Kooperative Schulzentren	Cooperative school center—basic, intermediate, and academic tracks in one school, grades 7-9.
Kunstgewerbeschule	Art technical school—vocational upper secondary in the arts, grades 10-13; may include tertiary programs.
Landrealschule	Agricultural practical school—intermediate lower secondary, grades 7-9.
Landwirtschaftliche Berufsschule	Agricultural economics school—vocational upper secondary, grades 10-12.
Landwirtschaftsschule	Agricultural economics school—vocational upper secondary, grades 10-11.
Lehramtsschule	Teacher training school—grades 10-13.

*In some German cantons, preparation for the Mathematics-Science Maturity Certificate is given in an *Oberrealschule*, rather than a *Gymnasium*.

Lehre	Apprenticeship—upper secondary, grades 10-11, 10-12, or 10-13.
Lehrerseminar	Teacher training seminar—upper secondary, grades 10-13 or 10-14.
Lehrwerkstätte	Teaching workshop—fulltime vocational program, combining practical and theoretical training, grades 10-13.
Literargymnasium	Literary gymnasium—academic upper secondary; grades 10-12, 10-12½, 10-13; preparation for maturity exam types A & B.
Mädchenoberschule	Girls' upper school—intermediate lower secondary for girls, grades 7-9.
Mädchen Untergymnasium	Girls' lower gymnasium—academic lower secondary for girls, grades 7-9.
Maturitätsschule	Maturity school—academic upper secondary, grades 10-13; preparation for maturity exam, types A & B.
Metallarbeiterschule	Metalwork school—vocational upper secondary teaching metalwork, grades 10-12.
Mittelschule	Middle school—may be either intermediate or academic lower secondary, grades 7-9, or upper secondary, grades 10-13.
Nichtberufliche Fortbildungsschule	Non-vocational continuation education school—grades 10-12.
Oberklasse or *Oberschule*	Upper class—may be either basic or intermediate lower secondary, grades 7-9.
Oberrealschule	Upper non-classical school—academic and intermediate and upper secondary, usually offers preparation for maturity exam, type C, grades 10-12, 10-12½, 10-13.
Oberseminar	Upper seminar—tertiary teacher training (grades 13-14), last 1-2 years of 5-year teacher training begun in grade 10.
Primarschule, Mittelstufe	Primary school, middle grades—grades 4-6.
Primarschule, Oberstufe	Primary school, upper grades—grades 7-9.
Primarschule, Unterstufe	Primary school, lower grades—grades 1-3 or 1-6.
Progymnase or *Progymnasium*	Pre-gymnasium—academic lower secondary, grades 7-9.
Realgymnasium	Non-classical gymnasium—academic upper secondary; preparation for maturity exam, type C, grades 10-12, 10-12½, 10-13.
Realschule	Non-classical lower secondary school—usually intermediate lower secondary, stressing practical subjects; may include an academic track, pre-gymnasium section, grades 7-9.
Real- und Oberschullehrerseminar	Lower secondary teacher training seminar—upper secondary and tertiary, grades 10-14.
Realzurkurs	Non-classical prevocational course—intermediate lower secondary, grades 7-9.
Schule für Spitalberufe	School for hospital vocations—upper secondary, grades 10-12.
Sekundarrealoberschule or *Sekundarrealschule*	Secondary non-classical upper school—intermediate lower secondary, grades 7-9.
Sekundarschule	Secondary school—may be either basic or intermediate lower secondary, grades 6-9.
Sonderklasse or *Sonderschule*	Special education class—grades 1-9.
Sozio-pädagogisches Gymnasium	Social-pedagogical gymnasium—academic upper secondary preparing for Cantonal Maturity Certificate in teaching (Aargau Canton only). Grades 10-12.
Stadtrealschule	Municipal non-classical school—intermediate lower secondary, grades 7-9.

Lehrlingsschule	Apprentice school—academic (not vocational) upper secondary school (Obwalden Canton only), grades 10-13; preparation for maturity exam, types A & B.
Textil- und Modeschule	Textile and fashion school—vocational upper secondary, grades 10-12.
Töchtergymnasium	Girls' (literally, daughters') gymnasium—academic upper secondary for girls, grades 10-13.
Töchterschule	Girls' (literally, daughters') school—usually grades 10-11.
Übergangsklasse	Transition class—basic upper primary, grade 9.
Übergangsklasse	Transition class—basic upper primary or intermediate, grade 9.
Untere Mittelschule	Lower middle school—academic lower secondary, grades 7-9.
Untergymnasium	Lower gymnasium—academic lower secondary, grades 7-9.
Unterrealschule	Lower non-classical secondary school—intermediate lower secondary, grades 7-9.
Unterseminar	Lower seminar—upper secondary first part of teacher training, grades 10-12 or 10-13.
Verkehrsschule	Transportation school—vocational upper secondary, grades 10-13.
Volksschule	People's school—grades 1-6 or 1-6.
Vorbereitungskurs	Preparation course—may be either intermediate lower secondary, grades 7-9, or upper secondary course preparing for paraprofessional program, grades 10, 11, 12, or 13.
Vorlehrklasse	Pre-instruction class—basic upper primary prevocational training, grade 9.
Vorschule	Preparatory school—refers either to an upper secondary preparing for professional programs, grades 10-12 or 10-13, or a pre-primary school for 3-6 year-olds.
Weiterbildungsklasse or *Weiterbildungsschule*	Further education class—upper secondary, grades 10-11.
Werkklasse or *Werkjahr*	Work class—basic upper primary, final year, grade 9.
Werkschule	Work school—basic upper primary, pre-vocational school, grades 7-9.
Wirtschaftsgymnasium or *Wirtschaftswissenschaftliches Gymnasium*	Economics gymnasium—academic upper secondary; preparation for maturity exam, type E, grades 10-12½ or 10-13.

French

Académie	Academy—lower or upper secondary academic school, grades 7-13.
Apprentissage et Cours complémentaires professionels	Apprenticeship and part-time vocational courses—upper secondary, grades 10-13.
Atelier	Teaching workshop—vocational upper secondary, grades 10-13.
Centre d'enseignement professionelle pour l'industrie et artisanat	Center of vocational education for industry and trades—vocational upper secondary, grades 10-13.
Classe complémentaire	Supplemental class—basic upper primary, grades 7-9.
Classe d'adaptation	Adjustment class—first year academic lower secondary—grade 7.
Classe de promotion	Promotion, i.e., terminal class—basic upper primary, grade 9.
Classe d'observation	Observation class—not divided into academic tracks, grade 7.

Classe d'orientation professionnelle	Class for orientation—grade 6, intermediate level, grade 9.
Classe de transition	Transition class—intermediate lower secondary, grade 9.
Classe enfantine	Kindergarten or preschool class.
Classe ménagère	Home economics class—basic upper primary, grade 9.
Classe moderne	Modern class—indicates non-traditional program, but may be either intermediate or academic, grades 7-9.
Classe pratique	Practical class, basic upper primary, grades 7-9.
Classe préprofessionnelle	Prevocational class—intermediate lower secondary, grades 7-9.
Classe primaire	Primary class—grades 1-6.
Classe spéciale	Class for special education—grades 1-9.
Classe supérieure	Upper class—may be either intermediate or academic lower secondary school, grades 7-9.
Classe terminale	Terminal class—basic upper primary, grade 9.
Collège	College—may be either lower or upper secondary, grades 7-9 or 10-13.
Collège artistique	Artistic college—upper secondary, grades 10-13.
Collège cantonal	Cantonal college—may include basic, intermediate, and academic programs in one school, grades 6-9.
Collège classique	Classical college—academic lower secondary, grades 7-9, or upper secondary, grades 10-13, preparing for maturity exam, types A & B.
Collège de culture générale	General culture—upper secondary, grades 10-12; not preparation for maturity exam.
Collège inférieur	Lower college—intermediate lower secondary, grades 7-9.
Collège moderne	Modern college—either intermediate lower secondary or academic upper secondary school, non-traditional course of studies, grades 7-9 or grades 10-13; may prepare particularly for maturity exam, type D.
Collège scientifique	Scientific college—academic lower secondary, grades 7-9, or upper secondary, grades 10-13, preparing for maturity exam, type C.
Collège secondaire	Secondary college—may be either intermediate or academic lower secondary, grades 7-9.
Collège supérieur	Upper level college—academic upper secondary, grades 10-13.
Cours complémentaires non-professionnels	Part-time nonvocational course—upper secondary, grades 10-11.
Cycle d'orientation	Orientation cycle—usually intermediate, grades 7-9, but may also refer to grades 4-6; untracked programs which defer decision on education tracks.
Ecole commerciale	Commercial school—vocational upper secondary, grades 10-13.
Ecole complémentaire agricole, ménagère et de culture générale	Agricultural, home economics, and general culture complementary school—general education continuation school, grades 10-11 or 10-12.
Ecole complémentaire professionnelle	Professional complementary school—part-time vocational school, grades 10-13.
Ecole d'agriculture	School of agriculture—upper secondary, grades 10-11 or 10-12.
Ecole d'art	School of art—upper secondary or tertiary.
Ecole d'arts appliqués	School of applied arts—upper secondary or tertiary.
Ecole d'arts décoratifs	School of decorative arts—upper secondary or tertiary.
Ecole de culture générale	School of general culture—upper secondary, grades 10-12. Does not prepare for maturity exams.

Ecole de jardinières d'enfant	School of kindergarten—upper secondary, grades 10-11, kindergarten teacher training school.
Ecole de laiterie	School of dairying—vocational upper secondary or tertiary.
Ecole de maturité	School of maturity—academic upper secondary, grades 10-13.
Ecole de métiers or *Ecole des arts et métiers*	School of trades—vocational upper secondary or advanced vocational.
Ecole des beaux arts	School of fine arts—upper secondary or tertiary.
Ecole d'horticulture	School of horticulture—vocational upper secondary or tertiary.
Ecole du degré diplôme	School of diploma level—upper secondary general education continuation school, grades 10-11 or 10-12.
Ecole enfantine	Kindergarten or nursery school.
Ecole globale	Global (all-inclusive) school—grades 7-9; offers basic, intermediate, and academic in one school.
Ecole ménagère, cycle inférieur	Home economics school, lower cycle, basic upper primary, grade 9.
Ecole normale	Normal school—grades 10-12 or 10-13, sections for primary, home economics, handicraft and kindergarten teacher training.
Ecole primaire, cycle inférieur or *niveau inférieur*	Primary school, lower cycle—grades 1-4 or 1-6.
Ecole primaire, cycle supérieur or *niveau supérieur*	Primary school, upper cycle—basic upper primary, grades 7-9.
Ecole professionnelle	Vocational school—usually upper secondary, grades 10-13, may be advanced vocational training center.
Ecole professionnelle supérieure	Higher vocational school—usually upper secondary, grades 10-13, for gifted apprentices.
Ecole secondaire	Secondary school—grades 7-9; may include basic and intermediate programs.
Ecole secondaire du 1er degré or *Ecole secondaire inférieure*	Lower secondary school—basic or intermediate, grades 7-9.
Ecole supérieure de commerce	Higher school of commerce—commercial upper secondary school, grades 10-13; may offer both diploma and cantonal commercial maturity examination programs.
Ecole supérieure de jeunes filles	Higher school for young girls—lower or upper secondary school for girls, grades 6-12.
Ecole supérieure technique	Upper technical school, grades 10-13. (Do not confuse with *Ecole Technique Supérieure*, a tertiary institution.)
Ecole technique	Technical school—two year vocational school at tertiary level.
Enseignement préprofessionnel	"Prevocational teaching"—may be either basic or intermediate lower secondary, grades 7-9.
Enseignement primaire	"Primary instruction"—basic upper primary, grades 7-9.
Enseignement primaire, cycle inférieur	Primary instruction, lower cycle—grades 1-4 or 1-6.
Enseignement secondaire	Secondary instruction—may refer to basic, intermediate, or academic lower secondary or upper secondary programs, grades 7-9 or grades 10-13.
Enseignement secondaire du 1er cycle	Secondary instruction, first cycle—lower secondary programs, grades 7-9.
Enseignement secondaire du 2ème cycle	Secondary instruction, second cycle—upper secondary programs, grades 10-13.
Enseignement technique et professionnel	Technical and vocational instruction—refers to any level of such instruction.
Etude commune secondaire	Common secondary study—lower secondary programs, grades 7-9; not divided into academic tracks.

Gymnase	Gymnasium—academic upper secondary, grades 10-13.
Lycée, Lyceum, Lyzeum	Secondary school—grades 7-13.

Italian

Casa dei bambini	Kindergarten.
Centro scholastico per le industrie artistiche	Scholastic center for artistic industry—vocational upper secondary, grades 10-12.
Classe speciale	Handicapped class—usually grades 1-8.
Educazione prescolastica	Preschool education—kindergarten or nursery school.
Educazione professionale	Vocational education—refers to any level of such education.
Ginnasio: sezione inferiore	"Gymnasium": lower section—academic lower secondary, grades 7-9.
Ginnasio: sezione superiore	"Gymnasium": upper section—academic upper secondary, grades 10-13.
Insegnamento primario	Primary instruction—grades 1-4 or 1-6.
Insegnamento secondario	Secondary instruction—may include basic, intermediate, or academic programs, grades 7-9.
Liceo	Academic secondary school—grades 10-13.
Magistrale tipo A, B, C	Teacher training school—grades 10-12 or 10-13; type refers to level of training: Kindergarten, Elementary, Secondary.
Scuola d'agricoltura	School of agriculture—vocational upper secondary, grades 10-12.
Scuola d'arte e mestieri	School of arts and crafts—vocational upper secondary school, grades 9-13.
Scuola d'avviamento agricolo	School for agricultural preparation—vocational, intermediate lower secondary, grade 9.
Scuola d'avviamento commerciale	School for commercial preparation—intermediate lower secondary, grade 9.
Scuola d'avviamento professionale	School for vocational preparation—intermediate lower secondary, grade 9.
Scuola cantonale d'amministrazione	Cantonal school for administration—vocational upper secondary, grades 10-11.
Scuola cantonale d'arti e mestieri	Cantonal school for arts and trades—vocational upper secondary, grades 10-13.
Scuola economia domestica	School of home economics—basic lower secondary, grade 9.
Scuola di commercio	School of commerce—vocational upper secondary, grades 10-13.
Scuola elementare	Elementary school—grades 1-5.
Scuola laboratoria	Laboratory school—vocational upper secondary, grades 10-13.
Scuola maggiori	Upper school—basic lower secondary, grades 6-9.
Scuola materna	"Maternal school"—kindergarten or nursery school.
Scuola media	Middle school—may be either intermediate or academic lower secondary, grades 6-8.
Scuola media professionale or *Scuola professionale*	Vocational school—upper secondary, grades 10-12.
Scuola professionale femminile	Vocational school for women—upper secondary, grades 10-12.
Scuola speciale	Special school—primary, for handicapped.
Tirocinio e corsi per apprendisti	Apprenticeship and courses for apprentices—vocational upper secondary, grades 10-13.

Appendix B

Private Schools in Switzerland Offering British, Canadian and/or U.S. Curriculums

(Academic Year: September-May or June)

Aiglon College, 1885 Chesières-Villars. Grades 6-13. Coed. English. Accredited by Swiss Cantonal Authorities. SAT, CGE O and A levels, International Baccalaureate. Diplomas: General, Academic, Honours.

American International School of Zürich, Nidelbadstrasse 49, 8802 Kilchberg, (Zürich). Grades 8-12. Coed. English. Accredited by Zürich Board of Education. SAT. Diplomas: General, Academic, Honours.

The American School in Switzerland, 6926 Montagnola-Lugano, Ticino. Grades 7-12. Coed. English. SAT, ACH, AP, International Baccalaureate.

Château Brillantmont. *See* Institution Château Brillantmont.

Châtelard School. *See* Collège International des Avants.

Château Beau-Cèdre, Rue du Lac 59, 1815 Clarens (Montreux). Grades 9-12. Girls. French. Alliance Française, Cambridge First Certificate of Proficiency in English, GCE O and A levels, SAT.

Collège Alpin International Beau-Soleil, 1884 Villars-sur-Ollon. Grades 5-12. Coed. French/English. SAT and Swiss Maturity ABCD.

Collège du Léman International School, 1290 Versoix, Genève. Grades 1-13. Coed. French/English. Accredited by Middle States Association of Colleges and Schools. SAT, GCE O levels, Swiss Maturity ABCDE, French *Baccalauréat*.

Collège International des Avants (formerly Châtelard School), 1833 Les Avants, Montreux. Grades 1-10. Coed. French. Language, secretarial and general education only.

Commonwealth-American School, AV. C-F, Ramuz 73, 1009 Pully. Grades 1-10. English.

Ecole des Roches, Pensionnat Près Fleuris, 3961 Bluche-sur-Sierre, Valais. Grades 4-13. Coed. French/Italian/English. SAT, GCE O levels, Canadian Matriculation, Diploma of Swiss Federation of Commercial Schools, French *Baccalauréat*, Swiss Maturity, Italian *Maturità*.

Ecole d'Humanité, 6082 Goldern-Hasliberg. Grades 1-12. Coed. German. SAT, GCEs in some subjects, Swiss Maturity ABCD.

Ecole Internationale Brillantmont. *See* Institution Château Brillantmont.

Ecole Lémania, Chemin de Préville 3, Lausanne. Grades 5-13. Coed. French. Swiss Maturity ABCDE, French *Baccalauréat* ABCD, Commercial Section.

Ecole Nouvelle de la Suisse Romande, Chemin de Rovéréaz 20, 1012 Chailly/Lausanne. Grades K-13. Coed. French. Swiss Maturity ABC, International Baccalaureate.

Ecole Nouvelle Préparatoire, Route du Lac 22, 1094 Paudex. Grades 3-12. Coed. French. SAT and Swiss Maturity. Commercial Section.

Ecole-Pensionnat La Pensée. *See* Institution La Pensée.

Ecole Privée Tournesol, Gstaad. Grades 1-10. English. GCE O levels.

Ecole Rochat-Burdin, Rue Voltaire 16, 1200 Genève. Day and evening. GCE O and A levels, American programs, Swiss Maturity CD.

English-Speaking School of Berne, Mattenstrasse 3, 3073 Gümligen. Grades K-9, English.

Gallus-Lyceum (Swiss American School Foundation). *See* Rosehill International School.

Gstaad International School, 3780 Gstaad. Grades 6-12. Boys. English. SAT, GCE O and A levels, Canadian curriculum.

Institut Alpin Videmanette, 1838 Rougemont. Girls, ages 16-20. French. Language & commercial programs.

Institut de Jeunes Gens, Le Rosey, 1180 Rolle, Vaud. Grades 4-12. Coed. French/English. SAT, Canadian Matriculation, GCE O and A levels, Swiss Maturity CD, French *Baccalauréat*.

Institut d'enfants Gai-Matin, 1885 Villars-Chesières, Vaud. French/English. Swiss Maturity.

Institut Dr. Schmidt, Lutry, Vaud. Grades 7-12. Boys. French. SAT, Swiss Maturity, Commercial Diploma, cantonal *Baccalauréat*.

Institut International, La Chatelaine, Neuchâtel. Non-functioning. Offered SAT, GCE O levels.

Institut International Le Mesnil, Bon-Port 9, 1842 Territet, Montreux. GCE O and A levels, Swiss Commercial Diploma.

Institute Israelite Ascher, 1880 Bex-les-Bains, Vaud. French/Hebrew.

Institut le Vieux Chalet, 1837 Château d'Oex, Vaud. Girls. French. GCE O and A levels, French Diploma of Alliance Française.

Institut Montana, 6316 Zugerberg, Zug. Grades 6-12. Boys. English. College preparatory.

Institution Anglo-Suisse, Le Manoir, 2525, La Neuveville, Berne. Secondary level. Girls. French. Individual preparation for GCE, language training & commercial courses.

Institution Château Brillantmont (or Ecole Internationale Brillantmont), Avenue Secrétan 12-18, 1005 Lausanne. Grades 8-12. Coed. English/French. SAT, GCE O and A levels, Swiss ABCD, International Baccalaureate, Alliance Française I and II Certificates, Cambridge Certificate of Proficiency in English, Geothe (Institute) Certificate, Swiss Commercial Certificate, Certificate of Domestic Science.

Institution Château Mont-Choisi, Bd. de la Forêt 18, 1012 La Rosiaz (Lausanne). Grades 7-12. Girls. French. SAT, GCE O and A levels, Swiss Maturity, International Baccalaureate, Swiss Secretarial Commercial Certificate of Proficiency, Diploma in Commerce.

Institution la Pensée (also known as Ecole-Pensionnat la Pensée), Route de Lavaux 12, 1800 Vevey, Vaud. French/English. SAT, GCE O and A levels, Swiss Maturity AB.

International School of Berne, 3073 Gümligen bei Bern. Grades K-12. Coed. English. SAT, GCE O and A levels.

International School of Geneva (5 locations), 62, Route de Chêne, 1208 Genève. Grades K-13. English/French. Accredited by Middle States Association of Colleges and Schools. SAT, GCE O and A levels, International Baccalaureate, Swiss Maturity BCD.

Le-Manoir. *See* Institution Anglo-Suisse, Le Manoir.

Leysin American School, 1854 Leysin. Grades 9-12. Coed. SAT.

Lycee d'Arvel. *See* Monte Rosa International School.

Maison de la Harpe. *See* Collège Alpin.

Monte Rosa International School and Lycée d'Arvel (Swiss American School Foundation), Rue de Chillon 3, 1842 Territet, Montreux. Grades 2-12. English/German. SAT, GCE, Canadian examinations.

Neuchâtel Junior College, Crêt-Taconnet 4, 2000 Neuchâtel. Grade 13. Coed. English. Graduation Diploma for Grade 13 awarded from Canada.

Institut international Orion, Av. Montagibert 20, 1000 Lausanne. Coed. College preparatory, commercial, secretarial, domestic science programs.

Préalpina Institut International de Jeunes Filles, 1605 Chexbres. Grades 6-13. Girls. French. French *Baccalauréat, Diplôme de Commerce, Diplôme de Secrétaire.*

Rosehill International School and Gallus-Lyceum (Swiss American School Foundation), Höhenweg 60, 9000 St. Gallen. Grades 4-12. Coed. German. SAT, GCE A levels.

St. George's School, 1815 Clarens. French/English. Cambridge GCE O and A levels, Royal Schools of Music and Royal Society of Arts exams, and one diploma of the University of Nancy (France).

Villa Brillantmont, Lausanne. Girls. Finishing school for high school graduates.

Villa Pierrefeu, Montreux. Girls. French. Finishing school.

Voralpines Knabeninstitut Montana. *See* Institut Montana.

Appendix C

Federally Recognized Swiss Academic Upper Secondary Schools

[The list is by canton, followed by city, school name, and type of maturity certificate. The letters stand for the various types of maturity certificates as follows: A, Classics (Greek & Latin); B, Latin & Modern Languages; C, Math & Science; D, Modern Languages; E, Economics. Slashes have been used to separate different schools in the same city.]

Aargau—Aarau: Kantonsschule, ABCE/ Kantonsschule Zelgli, D; Baden: Kantonsschule, ABC; Wettingen: Kantonsschule D; Wohlen: Kantonsschule, BD; Zofingen: Kantonsschule ABCD.

Appenzell-Ausserrhoden—Trogen: Kantonsschule, ABC.

Appenzell-Innerrhoden—Appenzell: Kollegium St Antonius, AB.

Basel-Landschaft—Liestal: Gymnasium, ABCE; Münchenstein: Gymnasium, ABCE; Muttenz: Gymnasium, ABCE; Oberwil: Gymnasium, ABCE.

Basel-Stadt—Basel: Freie Evangelische Schule, AB/ Gymnasium am Kohlenberg, AB/ Gymnasium Bäumlihof, ABCD/ Holbein-Gymnasium, BD/ Humanistisches Gymnasium, AB/ Kantonale Handelsschule, E/ Mathematisch-Naturwissenschaftliches Gymnasium, C/ Realgymnasium, B.

Bern—Bern: Freies Gymnasium, ABC/ Städtisches Gymnasium Kirchenfeld, ABCE/ Städtisches Gymnasium Neufeld, ABCE; Biel (Bienne): Deutsches Gymnasium, ABC/ Gymnase français, ABC/ Wirtschaftsgymnasium der Stadt Biel (Gymnase économique de la ville de Bienne), E; Burgdorf: Gymnasium, ABC; Interlaken: Gymnasium, ABC; Köniz: Gymnasium, ABC; Langental: Gymnasium, ABC; Laufen: Regionales Gymnasium Laufental-Thierstein, ABC; Thun: Gymnasium, ABC.

Fribourg (Freiburg)—Bulle: Gymnase du Sud, ABCE; Fribourg: Collège cantonal Saint-Michel (Kollegium St Michael), ABCE/ Ecole supérieure de commerce pour jeunes filles (Höhere Handelsschule für Töchter), E/ Lycée cantonal Sainte-Croix (Kantonales Gymnasium Heilig Kreuz), ABC.

Genève—Genève: Collège Calvin, ABCD/ Collège de Candolle, ABCD/ Collège Claparède, BCD/ Collège du soir, ABCD/ Collège Rousseau, ABCD/ Collège Sismondi, ABCD/ Collège Voltaire, ABCD. (All Genève schools listed, except Collège du soir, are part of the Collège de Genève. This school has one additional section, Collège de Saussure, which does not have federal recognition.)

Glarus—Glarus: Kantonsschule (Gymnasium and Oberrealschule), ABC.

Graubünden (Grisons)—Chur: Bündnerische Kantonsschule, ABCE; Davos: Schweizerische Alpine Mittelschule, ABC; Disentis/ Muster: Klosterschule, AB; Fetan: Hochalpines Töchterinstitut, B; Samedan: Evangelische Mittelschule, E; Schiers: Evangelische Mittelschule, ABC; Zuoz: Lyceum Alpinum, ABCDE.

Jura—Porrentruy: Lycée cantonal de Porrentruy, ABCE.

Luzern—Beromünster: Kantonsschule, AB; Luzern: Kantonsschule, ABCE; Reussbühl: Kantonsschule, ABC; Sursee: Kantonsschule, ABC.

Neuchâtel—Fleurier: Gymnase du Val-de-Travers, D; La Chaux-de-Fonds: Ecole supérieure de commerce, E/ Gymnase cantonal, ABCD; Neuchâtel: Ecole supérieure de commerce, E/ Gymnase cantonal, ABCD/ Gymnase Numa-Droz, ABD.

Nidwalden—Stans: Kollegium St Fidelis, AB.

Obwalden—Engelberg: Stiftsschule, AB; Sarnen: Kantonsschule Obwalden Kollegium, ABE.

Schaffhausen—Schaffhausen: Kantonsschule, ABC.

Schwyz—Einsiedeln: Stiftsschule des Klosters Einsiedeln, AB; Immensee: Gymnasium, ABE; Ingelbohl: Institut Theresianum, B; Nuolen, Christ-König-Kollegium, AB; Schwyz: Kantonsschule Kollegium, ABCE.

Solothurn—Olten: Kantonsschule, ABCE; Solothurn: Kantonsschule, ABCE.

St. Gallen—Gossau: Gymnasium Friedberg, AB; Heerbrugg: Kantonsschule, ABCE; Rome, Italy: Wirtschaftsgymnasium der Schweizerschule, E; St. Gallen: Kantonsschule, ABCE/ Ostschweizerische Maturitätschule für Erwachsene, BCDE; Sargans: Kantonsschule, ABCE; Wattwil: Kantonsschule, ABCE.

Thurgau—Frauenfeld: Thurgauische Kantonsschule, ABCE; Kreuzlingen: Thurgauische Kantonsschule, ABC; Romanshorn: Thurgauische Kantonsschule, ABC; Steckborn: Gymnasium Schloss Glarisegg, ABCD.

Ticino—Bellinzona: Liceo economico-sociale, E/ Liceo classico-scientifico, ABC; Locarno: Liceo cantonale, ABC; Lugano: Liceo cantonale, ABCDE; Mendrisio: Liceo cantonale, ABC.

Uri—Altdorf: Kantonale Mittelschule Uri (Kollegium Karl Borromäus), ABC.

Valais—Brig: Kollegium Spiritus Sanctus, ABCE; Saint-Maurice: Collège de l'Abbaye, ABCE/ Collège Regina Pacis, B; Sion: Lycée-Collège, ABCE/ Pensionnat Sainte-Marie-des-Anges, B.

Vaud—La Tour-de-Peilz: Gymnase cantonal de Burier, ABCD; Lausanne: Gymnase cantonal de la Cité, ABCD/ Gymnase cantonal du Belvédère, ABCD/ Gymnase cantonal de Montbenon, ABD; Pully: Gymnase cantonal de Chamblandes, BCD; Yverdon: Gymnase cantonal d'Yverdon, ABCD.

Zug—Oberägeri: Institut Dr Pfister, ABCE; Zug: Kantonsschule, ABCE; Zugerberg: Internationales Knabeninstitut Montana, ABCE.

Zürich—Bülach: Kantonsschule Zürcher Unterland, ABC; Urdorf: Kantonsschule Limmattal, ABC; Wetzikon: Kantonsschule Zürcher Oberland (Mathematisch-naturwissenschaftliches Gymnasium, Gymnasium und Wirtschaftsgymnasium), ABCE; Winterthur: Kantonsschule Büelrain, E/ Kantonsschule im Lee, BC/ Kantonsschule Rychenberg, AB; Zürich: Freies Gymnasium, ABC/ Kantonale Maturitätsschule für Erwachsene (Cantonal Maturity School for Adults), BC/ Kantonsschule Freudenberg, AB/ Kantonsschule Höhe Promenade, AB/ Kantonsschule Hottingen, E/ Kantonsschule Oerlikon, ABC/ Kantonsschule Rämibühl, Literargymnasium, AB/ Kantonsschule Rämibühl, Mathematisch-naturwissenschaftliches Gymnasium, C/ Kantonsschule Rämibühl, Realgymnasium, B/ Kantonsschule Stadelhofen, BC/ Kantonsschule Wiedikon, AB.

SOURCE: *Verzeichnis der Schulen, deren Maturitätsausweis vom Bund anerkannt sind, Eidgenössisches Departement des Innern, December 1, 1980.*

Glossary

Every effort has been made to provide translations in the text as appropriate. Appendix A gives translations of most secondary school subjects. These terms will not be repeated in the glossary. The letters F, G, & I in parentheses indicate that a word is French, German, or Italian.

Abhandlung (G)	dissertation
Abteilung (G)	department
Aufnahmeprüfung (G)	entrance examination
Ausweis (G)	certificate
Beaux-arts (F)	fine arts
Befriedigend (G)	satisfactory
Betragen (G)	average or conduct
Betriebswirtschaftslehre (G)	business economics
Buchhaltung (G)	bookkeeping
Chiffres (F)	numbers
Datenverarbeitung (G)	data processing
Deutsch (G)	German
Dozent (G)	lecturer
Durchschnitt (G)	average
Ecrit (F)	written
Erwachsene (G)	adult
Erziehungsdirektor (G)	Director of Education
Fächer (G)	subjects
Fachzweig (G)	branch of specialization
Fleiss (G)	diligence
Französisch (G)	French
Fremdsprache (G)	foreign language
Geringste (G)	poorest, least good
Geschichte (G)	history
Gewichtete Note (G)	weighted grade
Grade (F)	degree
Handfertigkeit (G)	manual skill
Handschrift (G)	handwriting
Hauptfach (G)	major subject
Heftführung (G)	exercise book neatness
Kunst (G)	art
Leistung (G)	performance
Massgebende (G)	required
Mention (F)	adjective which qualifies either the grade received or the specialization followed
Migliore (I)	best
Moyenne (F)	average
Mündlich (G)	oral
Nebenfach (G)	minor subject
Nichtmassgebende (G)	not required, elective
Peggiore (I)	poorest
Procès-verbal (F)	official report of coursework
Propédeutique (F)	intermediate examination
Rechnen (G)	arithmetic

Schriftlich (G)	written
Schüler (G)	student
Schweizerische (G)	Swiss
Scritto (I)	written
Staatskunde (G)	civics
Studienarbeit (G)	thesis work
Tedesco (I)	German
Turnen (G)	gymnastics, sports
Vordiplomprüfung (G)	intermediate examination
Vorläufig (G)	provisional
Wahlfächer (G)	electives
Weitere (G)	additional
Wirtschaft (G)	economics
Wissenschaft (G)	science
Wochenstunden (G)	hours per week of studies
Zeugnis (G)	certificate

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The Role of the Council

The placement recommendations in this book have been approved by the National Council on the Evaluation of Foreign Educational Credentials. In order that these recommendations may be of maximum use to admissions officers, the following information on the development of the terminology used in stating the recommendations, along with instructions for their use, is offered by the Council and the World Education Series Committee.

The recommendations deal with all levels of formal education in roughly chronological order up through the highest degree conferred. Recommendations, as developed through discussion and consensus in the Council, are not directives. Rather, they are general guidelines to help admissions officers determine the admissibility and appropriate level of placement of students from the country under study.

The recommendations should be used flexibly rather than literally. In using the recommendations, admissions officers should read the supporting pages in the text and take into account their own institutional policies and practices. For example, a recommendation may be stated as follows: "... may be considered for up to 30 semester hours of transfer credit." The implication is that the U.S. institution may consider giving less than or as much as one year of transfer credit, the decision to be based on various factors—the currentness of the applicant's transfer study, applicability of the study to the U.S. curriculum, quality of grades, and the receiving institution's own policies regarding transfer credit. Similarly, the recommendation "... may be considered for freshman admission" indicates possible eligibility only; it is not a recommendation that the candidate be admitted. Although consideration for admission at the same level may be recommended for holders of two different kinds of diplomas, use of identical phrasing in the recommendation does not mean that the two diplomas are identical in nature or quality, or in the quantity of education they represent.

In most cases, the Council will not have attempted to make judgments about the quality of individual schools or types of educational programs within the system under study. Quality clues are provided by the author and must be inferred from a careful reading of the text.

Certain phrases used repeatedly in the recommendations have acquired, within Council usage, specific meanings. For example, "through a course-by-course analysis" means that in dealing with transfer credit, each course taken at the foreign institution is to be judged on an individual basis for its transferability to the receiving institution. Another phrase, "where technical training is considered appropriate preparation" suggests that the curriculum followed by the candidate is specialized, and this wording is often a hint that within the foreign system, the candidate's educational placement options are limited to certain curriculums. However, while the Council is aware of the educational policies in the country under study, its policies are not necessarily set in conformity with that country's policies. Rather, the recommendations reflect the U.S. philosophy and structure of education.

In voting on individual recommendations, Council decisions are made by simple majority. Although consistency among volumes is sought, some differences in philosophy and practice may occur from volume to volume.

NATIONAL COUNCIL ON THE EVALUATION OF FOREIGN EDUCATIONAL CREDENTIALS

The Council is an interassociational group that serves as a forum for developing consensus on the evaluation and recognition of certificates, diplomas, and degrees awarded throughout the world. It also assists in establishing priorities for research and publication of country, regional, or topical studies. One of its main purposes is to review and modify admissions and placement recommendations drafted by World Education Series authors or others who might ask for such review. (The practices followed in fulfilling this purpose are explained on p. 133.)

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